
Contract Reform Self Assessment Report



**Office of Contract Reform and Privatization
U.S. Department of Energy**

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EXECUTIVE SUMMARY

Introduction

The primary objective of this self assessment is to report on the Department of Energy's progress in implementing the Contract Reform Initiative launched in February 1994 and to discuss remaining challenges. The 1994 Report of the Contract Reform Team called for a reform of DOE contracting practices that had resulted over the years in such deficiencies as insufficient accountability of the contractors that manage DOE facilities, inadequate competition for the award of major contracts and subcontracts, weak financial controls, excessive reliance on cost-reimbursement methods, and an overall emphasis on process rather than results.

The Report of the Contract Reform Team contained numerous recommendations which addressed the daunting task of changing almost 50 years of contracting practices. It was anticipated that implementation of these recommendations would change the Department's traditional way of doing business and substitute alternative approaches that were more efficient and cost-effective. The history of contract reform to date consists of (1) reflecting the recommendations in contracting strategies, requests for proposals, and contract documents; (2) developing regulations, DOE directives, model contract provisions, and guidance documents; and (3) establishing new systems and processes to administer the new contracts and programs to achieve improved results.

This self assessment is organized along the lines of the eleven basic elements that constitute the full range of contract reform. These elements are: increased competition; increased use of fixed-price contracting; performance-based contracting (which includes performance criteria and measures, results-oriented statements of work, and performance-based incentives); cost reduction; diversity; protection of the worker, the public, and the environment; greater financial accountability; improved financial management; and increased use of the Federal Acquisition Regulation.

The overall conclusion that can be drawn from this self-assessment is that contract reform is being implemented across the DOE complex. Numerous examples of improved performance and cost savings have been documented. However, important issues and challenges remain, particularly with respect to the need to (1) strengthen the Department's policy, planning, and guidance efforts, (2) develop on-going programs for systematic analysis of key areas of contract reform, (3) realign management and financial systems with the needs of performance-based contracting, and (4) provide for critical human resource needs.

Contract Reform Accomplishments to Date

Increased Competition: The Department has a new policy, codified by rulemaking, in which the Department affirms its commitment to full and open competition in the award of management and operating contracts. Exceptions to competition are limited to those permitted by the Competition in Contracting Act, and then only when approved by the Secretary. Since 1994, the Department has made decisions to compete 11 management and operating contracts and to extend 15 management and operating contracts. Each of these decisions was consistent with the Department's competition policy.

These decisions also represent a significant increase in the number of competed contracts. Since 1994, 8 contracts have been competed. Competitions for 3 more contracts will be conducted within the next two years. In comparison, the Department initiated only 3 competitions involving management and operating contracts over the 10 years preceding contract reform. Three additional contracts were competed during this 10 year period when the incumbent decided to end its business relationship with the Department.

These competition decisions have produced new contracting approaches and strategies. At a number of sites, these strategies have spurred participation on a prime and major subcontract level by firms that had not generally participated in DOE procurements for traditional management and operating contracts. Recent new participants have included CH2M Hill and Dyncorp at the Rocky Flats Environmental Technology Site, and GTS Duratek at the Hanford Site.

Increased Use of Fixed-Price Contracting: DOE sites are using fixed-price contracts in new situations and with increasing frequency. At the prime contract level, the Hanford and Idaho Sites and the Waste Isolation Pilot Plant are examples where fixed-price arrangements are being used for work that had been historically conducted by the management and operating contractors on a cost-reimbursement basis. At the subcontract level, fixed-price contracting has been increased and/or maintained at a high level at a number of sites. For example, at the Kansas City Plant, fixed-price subcontracts accounted for 98 of all subcontracts during the past two years. At the Savannah River Site, 94 percent of FY 1996 subcontracts were on a fixed-price basis.

Performance-Based Contracting: Performance-based contracting is now the standard for the Department. By the end of calendar year 1996, the Department had converted 17 management and operating contracts to performance-based management contracts, each with the full range of contract reform provisions. These contracts are now characterized by results-oriented statements of work, performance criteria and measures to assess the quality of performance, and incentive fee arrangements to motivate enhanced performance. Preliminary data indicate that these contracts have contributed to measurably better performance. For

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example, at the Rocky Flats Environmental Technology Site, implementation of the performance-based contracting approach has contributed to significant performance improvements notwithstanding a budget reduction of \$100 million. In the first year of the contract, the contractor achieved, among other things, a 150 percent increase in the number of plutonium/uranium solution tanks drained and a doubling of environmental areas closed out. At the same time, systemic problems have arisen in the implementation of performance-based incentives, which must be aggressively addressed by the Department.

Cost Reduction: In addition to achieving better performance, cost reduction was a primary goal of contract reform. Specific areas targeted for reduction included support service contracts, indirect costs, and the overall costs of contractor performance. As a result of these efforts:

- DOE reduced expenditures for support service contractors by \$184 million between FY 1995 and FY 1996;
- DOE reduced functional support costs at 22 sites by a total of more than \$600 million from FY 1994 to FY 1996; and
- Contractor cost reduction programs have resulted in savings at various sites and include such efforts as a DOE agreement negotiated with the New York Power Authority to wheel power directly to the Brookhaven National Laboratory at rates significantly lower than those of the local power company, thereby saving approximately \$60 million over a four-year period.

Diversity: Another area receiving emphasis in contract reform is diversity. In addition to the traditional use of the Small and Small/Disadvantaged Business Subcontracting plan, DOE has emphasized diversity through mechanisms such as diversity-related qualification and evaluation criteria in contractor selection processes, and the use of diversity performance objectives for fee and incentive purposes. These efforts to ensure diversity in prime contracting have been moderately successful despite steadily declining budgets and reduced employment, which have served to limit opportunities.

Protection of the Worker, the Public, and the Environment: Traditional DOE management and operating contracts did not provide well-defined criteria for environment, safety, and health (ES&H) performance and relieved contractors of most financial risk for poor ES&H performance. As a result of contract reform, ES&H issues have assumed much greater importance in the selection of contractors and contract administration, and there is a higher level of contractor accountability for ES&H performance. ES&H performance objectives and measures also are included in contracts and are directly tied to contractor rewards and penalties. In addition, contractors bear a greater share of the risk if they fail to meet expectations. For example, under the Project Hanford Management Contract, successful ES&H performance is a pre-condition to obtaining the maximum fee for any activity.

Greater Financial Accountability: With respect to financial accountability, the Department has emphasized two areas: contractor financial accountability and litigation management. DOE has, among other things:

- Adopted new regulations and negotiated new contracts which provide for increased contractor accountability in the areas of fines, penalties, third-party liability, and property liability. For example, DOE shifted from a system that generally paid for contractor fines and penalties to one in which fines and penalties are now generally unallowable; and
- Achieved a 36 percent decrease in total contractor litigation costs tracked from 1994 through 1996 through increased cost control methods. In one case alone, the Department reduced annual litigation costs by more than 60 percent over a three-year period by consolidating cases from twelve law firms into two firms.

Improved Financial Management: The Department has addressed the need for improved financial management in several ways. First, in the area of financial management information systems, DOE has reviewed its needs and developed recommendations to improve its financial management systems, secured funding to begin the process of procuring a new financial management information system, and established the Financial Management Systems Improvement Council in order to improve contractor financial management systems and processes. Second, DOE has taken other actions, such as reducing uncosted balances from \$10.8 billion in FY 1993 to \$6.6 billion in FY 1996, and reducing contractor overtime from 4.7 percent of the base payroll in FY 1993 to 3.95 percent in FY 1995.

Increased Use of the Federal Acquisition Regulation: Management and operating contracts traditionally contained a set of terms, conditions, and cost principles that were drawn from the Department of Energy Acquisition Regulation (DEAR). The Department is now making greater use of government-wide Federal Acquisition Regulation (FAR)-based contract provisions. For example, DOE's June 1997 contract reform regulation requires the application of FAR standards to a number of cost-reimbursement policies, including the burden-of-proof standard for cost allowability. This FAR policy is expected to improve the DOE's ability to challenge unallowable costs by placing responsibility for justifying and documenting questioned costs on the contractor.

Remaining Challenges and Recommendations

While contract reform activities are pervasive in the Department and, as noted above, major accomplishments have been achieved, the self-assessment has also identified numerous challenges and issues. Addressing these challenges will require a commitment to continuous improvement. Based upon information derived from the self assessment, the following actions are recommended.

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1. Strengthen the Department's policy, planning, and guidance relating to contract reform by, for example:
 - Completing development of a Department-wide fee and incentive policy and rulemaking;
 - Providing additional guidance on the development and administration of performance measures and incentives; and
 - Ensuring that a clear linkage exists between strategic planning and acquisition planning at the Departmental, program, and site levels.
2. Develop on-going programs of systematic analysis for key areas of contract reform. Areas that are candidates for such analysis include: implementation of performance-based incentives; effectiveness of fixed-price contracting mechanisms; implementation of teaming arrangements and privatization approaches; alternative competition procedures for nonprofit contracts; and the results of new regulations governing contractor accountability. The analysis should include data collection, problem identification, and recommendations for corrective actions.
3. Continue efforts to realign management and financial systems with the needs of contract reform by, for example:
 - Completing the development and implementation of new financial information systems to provide timely cost and performance information to managers; and
 - Developing improved systems for identification, collection, and reporting of costs. This includes completing implementation of a Department-wide functional support cost reporting system. These systems will assist the Department in improving efforts in performance measurement, incentive development and administration, baselining, benchmarking, overtime control, litigation cost control, and support cost control.
4. Address human resource needs by, for example:
 - Performing a skills assessment of current employees to determine training and hiring requirements in such key contracting areas as contractor selection, contract negotiation, administration of performance-based management contracts, and administration of fixed-price contracts; and
 - Establishing a Headquarters/Field cadre of experts (e.g. procurement, legal, technical, ES&H) to assist and advise sites and offices in solicitations, negotiations, and administration of performance-based management contracts.

SECTION I

OVERVIEW OF THE CONTRACT REFORM INITIATIVE

This section of the report provides an overview of the Department of Energy's contract reform process to date, the institutional mechanisms that have been created to ensure implementation of contract reform, and efforts that have been initiated for continuous improvement.

A. Characteristics of the Pre-Contract Reform Period

Reviews in the 1980s and early 1990s by the General Accounting Office, the DOE Inspector General, and other agencies identified numerous weaknesses in DOE's contracting practices, including:

- Insufficient accountability of management and operating contractors;
- Excessive reliance on cost-reimbursement contracts;
- Inadequate competition of management and operating contracts;
- Overly broad indemnification of contractors;
- Use of vague and nonstandard provisions in contracts;
- Weak financial and accounting controls; and
- Inadequate contractor procurement and property management controls.

The management and operating contract in common use was a cost-reimbursement arrangement that generally included award fee provisions, but lacked well-defined statements of work or performance criteria and measures upon which to base award fee decisions. These contracts typically focused on capabilities in terms of size and skill mix, rather than a defined scope of work. DOE also developed a comprehensive set of directives that prescribed in excessive detail how contractors were to perform a wide variety of tasks with little or no emphasis on the results that DOE was seeking. There was frequent criticism that the Department awarded to contractors the same general fee amount regardless of performance.

There was little competition in awarding contracts to manage and operate DOE's major sites and laboratories, and additionally those contractors did not seek competition to the fullest extent in awarding subcontracts. Policies and practices favored indefinite contractual relationships with incumbents rather than seeking competitive proposals from other organizations. Burdensome, protracted, and costly solicitation procedures discouraged qualified market participants from doing business with DOE.

In general, pre-contract reform contracting practices can be characterized by

- Prescriptive contract management rather than experimentation and exercise of judgment;
- Emphasis on process rather than on results;
- Transactional reviews of contractor decisions rather than systems review;
- Emphasis on compliance rather than performance;
- Uncoordinated, redundant oversight rather than coordinated, consolidated oversight;
- Use of the "Federal norm" as the standard for contractor procurement rather than best industry practice;
- Traditional contracting strategies rather than innovative strategies;
- Administration based on function rather than results; and
- Traditional, rather than streamlined, solicitation techniques.

The weaknesses in DOE's contracting practices were significant, systemic, and no longer justified by the exigencies of the Cold War Era. The correction of these weaknesses required a thorough examination of the current mission of the DOE and evaluation of the kinds of contracts and contracting practices needed to fulfill that mission at the lowest cost commensurate with quality performance.

B. The Report of the Contract Reform Team and Its Action Items

In 1993, the Secretary created the Contract Reform Team which was chaired by the Deputy Secretary of Energy. The Team was comprised of DOE representatives, as well as three representatives from the Office of Management and Budget. The membership encompassed both political and career officials, spanned a wide variety of program and administrative offices, and included both DOE Headquarters and field office representatives. Subteams were created to look at the complete range of DOE's contracting practices, and a series of public stakeholder meetings were held at each of DOE's eight operations offices, and in Washington, DC.

In February 1994, the Team issued *Making Contracting Work Better and Cost Less: Report of the Contract Reform Team*, which summarized the results of its work. This report:

- Reviewed the history of DOE contracting practices during the previous 50 years;
- Detailed the need for changes in contracting practices that originated with the Manhattan Project of the 1940s;
- Reviewed initiatives already in progress; and

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- Outlined recommendations.

The Reform Team recommended 47 specific actions that would significantly improve the contracting practices. Each identified a deliverable to fulfill the intent of the action item, set forth a deadline for the deliverable, and identified the office responsible for producing the deliverable. The Secretary subsequently added another recommendation to the Reform Team's list, regarding diversity among participating contractors and subcontractors. A list of the 48 action items is contained in Appendix A.

Although the formal process of implementing the Report's recommendations became strongly influenced by other events discussed below, the importance of this effort in establishing a contract reform initiative within the Department's culture cannot be overstated. This initiative was given a high priority and profile. Several hundred DOE employees were involved in providing the deliverables. Staff who worked on these action items became knowledgeable not only of the subject matter of the deliverable on which they worked, but also on related action items as well as ideas and approaches of other offices. As a learning and sharing experience, it has helped to institutionalize contract reform and change the culture of the Department.

For example, there were five teams that worked on action items related to performance criteria and measures:

- Programmatic;
- Business management;
- Environment, safety and health;
- Real and personal property; and
- General guidance.

These teams not only combined their efforts to produce a single cohesive product, but also provided input and guidance to the team responsible for developing training in performance-based contracting.

More importantly, most of the work products contained in the deliverables have been incorporated into rulemaking, DOE Orders, Acquisition Letters, policy documents, and model and actual contract provisions. Many of the findings of this self assessment reflect implementation, in whole or in part, of the substance of the action items. For example, DOE's final rulemaking, published on June 27, 1997 addressed action items related to competition, performance-based management contracting, payment of fee, increased liability and accountability of contractors, make or buy decisions, environment, safety and health, and overtime compensation.

C. The Executive Committee for Contract Reform and the Contract Reform Project Office

After the Secretary accepted the Contract Reform Team Report in February 1994, and while the Department was mobilizing to produce the required deliverables, the Secretary established the Executive Committee for Contract Reform to implement the Contract Reform Initiative. (See Appendix B). Co-chaired by the Deputy and Under Secretaries, the Executive Committee consisted of Assistant Secretaries and other key officers of the Department. The Executive Committee's role has been to:

- Establish overall goals and objectives;
- Define basic policies and principles;
- Assess overall progress and effectiveness; and
- Remove barriers to progress.

The Secretary further directed the Executive Committee to appoint a project manager to facilitate and oversee the day-to-day implementation of contract reform. The project manager (subsequently retitled Director, Contract Reform Project Office) was selected in May 1994, and established the office on June 1, 1994. The Contract Reform Project Office was subsequently reestablished as the Office of Contract Reform and Privatization in March 1997. This action responded to a recommendation of the Report of the Privatization Working Group, dated January 1997.

D. Contract Reform Implementation Mechanisms

July 5, 1994, Decision Memorandum

On July 5, 1994, the Secretary expedited the process of contract extend/compete decision-making and decided, in a single action, to compete or conditionally extend 19 management contracts. In a memorandum of that date (Appendix C), she directed that all new contracts, whether newly competed contracts or those that were conditionally extended, "incorporate the full range of contract reform provisions" as a condition of acceptance by the Department. This action accelerated, by up to 18 months, the incorporation of contract reform provisions into contracts, since it was no longer necessary to wait for each individual contract to expire.

The memorandum resulted in establishment of a two-track process: while teams were working to produce the policies, procedures, and clauses called for by the action items, DOE offices concurrently mobilized to develop the solicitations, negotiation strategies, and contract documents necessary to expedite the Secretary's mandate. These parallel efforts necessitated continuous interaction between the contracting officials and action item team members. (In some cases they were the same individuals.) The two-track process permitted DOE great

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latitude in developing untried (to the M&O contract environment) concepts in a real world application and to adjust as lessons were learned. Equally important, this approach permitted DOE to apply contract reform during a very narrow window of opportunity. To wait for formal rulemaking and completion of all action items would have resulted in DOE not being able to effect contract reform in contracts until the 1997-2000 time frame. However, in adopting this approach, there were downsides, the most noteworthy of which was the fact that clear policy and guidance was not always available.

Basic Elements of Contract Reform

Work on the various solicitations, negotiation strategies, and draft contract documents necessary to implement the Secretary's memorandum had to begin as soon as possible. This made it critical to establish immediately a baseline of core contract reform elements and develop sample contract provisions in response to the Secretary's requirement that all new contracts incorporate "the full range of applicable contract reform provisions."

At a workshop held in August 1994, representatives of field elements and Headquarters personnel identified what they believed to be the essential principles of contract reform as applied to their operations. The Contract Reform Team report and the Secretary's July 1994 memorandum provided the bases for developing these essential principles, and the full range of reform was reflected in 11 basic elements of contract reform identified at the workshop (Table I-1). These 11 elements constituted a guide for developing acquisition strategy and provided a basis for review and approval of contract actions. Furthermore, they signaled the Department's contract reform expectations to present and potential contractors. These elements were approved by the Executive Committee in August 1994 and have served as a guide to the Department since that time.

Table I-1

Basic Elements of Contract Reform

<i>Increased Competition</i>	The Department has a strong and consistent commitment to competition at all prime and subcontract tiers, thereby encouraging new offerors to participate in the Department's activities. The Department will seek to mitigate the impacts on workers and communities of Department actions that cause workforce restructuring.
<i>Increased Use of Fixed-Price Contracts</i>	Where appropriate and cost-effective, the use of fixed-price prime contracts and subcontracts is maximized.
<i>Performance Criteria and Measures</i>	Clear, results-oriented statements of programmatic, business management, and ES&H contract performance requirements and quality standards, together with objective measurements of their accomplishment.
<i>Results-Oriented Statement of Work</i>	Statements of contract work focus on the purposes and outcomes of the work to be performed, and facilitate the development of specific performance criteria and measures to be included in the contract.
<i>Performance Based Incentives</i>	Monetary incentives (e.g., fee) and nonmonetary incentives (e.g., contract duration) are linked to performance criteria, encourage and reward accomplishment of stated performance requirements, and discourage substandard performance.

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<i>Cost Reduction</i>	Contractors are encouraged and where appropriate, incentivized, to propose and carry out detailed plans and programs to reduce contract costs.
<i>Diversity</i>	Individual and institutional diversity is promoted and facilitated through solicitations, contracts, and contract administration to involve human resources, contractors, subcontracting with and mentoring of small disadvantaged business and women-owned businesses, etc.
<i>Protection of the Worker, the Public, and the Environment</i>	The safety and health of workers and the public, and the protection and restoration of the environment, are fundamental to the responsibilities of the Department and its contractors, and critical to the success of all of the Department's activities.
<i>Greater Financial Accountability</i>	Contractor accountability is based upon a more equitable and rational allocation of costs and risks of performance between the Department and the contractor, particularly in the areas of reimbursement of fines and penalties, third party claims, and loss of or damage to government property.
<i>Improved Financial Management</i>	Department and contractor systems provide the full range of financial information needed for sound decision-making, and clear policies foster improved methods of unallowable cost recovery, and appropriate use of advance funding mechanisms.
<i>Increased Use of Federal Acquisition Regulation (FAR) Principles</i>	Greater use is made of applicable FAR-based (government-wide) cost principles in Department cost-reimbursement contracts, including nonprofit contracts.

"Model" Contract Provisions

Also in the summer of 1994, the Office of Energy Research initiated a Nonprofit Model Contract Initiative, led by the Chicago, Oakland, and Oak Ridge Operations Offices. The objective was to produce a set of "model" contract provisions to provide a coordinated approach for DOE nonprofit contract negotiations. The resulting document embodied the full range of contract reform provisions, such as results-oriented statements of work, performance criteria and measures, assumption by contractors of increased financial accountability, incentives based on performance, and cost savings programs.

Shortly thereafter, at the request of the General Counsel, a team of Headquarters and field personnel produced a draft document, *Sample Contract Provisions for Department of Energy*

Contracts with For-Profit Contractors. This document provided a set of contract clauses (many of which were examples of clauses that had been negotiated in recent contracts) for use in performance-based management contracts with for-profit contractors. Notice of the document's availability for public comment was published in the *Commerce Business Daily* in February 1995. A wide range of stakeholders including the Department's contractor/subcontractor community, labor organizations, and public interest groups submitted extensive comments.

Noteworthy features of this document included:

- New provisions that shifted financial responsibility to contractors in the areas of fines and penalties, third party liability, government property, and whistle blower protection;
- Mechanisms for identifying and using clear, objective, results-oriented performance criteria and measures;
- Sample award fee and incentive fee provisions, together with guidance on their use, that are designed to promote enhanced performance and cost-efficiency;
- Suggested labor relations provisions, including those that implement policies on work force restructuring; and
- A model Appendix covering allowable costs and advance understandings on personnel costs.

***The Performance-Based
Management Contract***

- ***Replaces traditional M&O contracts***
- ***Results-oriented statement of work***
- ***Performance measures and incentives***
- ***Full range of contract reform provisions***

The model contract provisions for both nonprofit and for-profit contracts have served as the basis for solicitations/negotiations for contracts awarded since 1994, as well as the Draft and Final Rulemakings on Contract Reform, published by the Department in the *Federal Register* on June 24, 1996, and June 27, 1997, respectively.

Special Contract Reform Review Board

With the Basic Elements guiding the full range of contract reform and the "model" contract provisions providing a consistent approach for contract solicitations and negotiations, the Department began incorporating the full range of reforms into its major contracts. At a September 1994 workshop for Headquarters and field personnel, field representatives expressed a need for an improved and streamlined process for acquisition planning and contract clearance. They suggested that their ability to reform contracts would be facilitated by, among

other things, expeditious coordination of Headquarters views regarding approaches to implementing contract reform, including such issues as contract type, appropriate performance criteria and measures, and special contract terms and conditions. Field representatives made a presentation to the Executive Committee recommending establishment of a senior-level Special Contract Reform Review Board to ensure that contract reform principles are timely and consistently applied to the contract actions directed by the Secretary's memorandum of July 5, 1994.

In September 1994, the Executive Committee approved the concept of the Board, and subsequently approved its structure, protocols, and responsibilities. The Board first met in November 1994 and has continued to meet when necessary to address contracts identified in the Secretary's memorandum as well as others. The Associate Deputy Secretary for Field Management chaired the Board, with the Office of Clearance and Support operating as the Secretariat.

Stakeholders Workshop

In November 1994, the Contract Reform Project Office, in cooperation with the National Contract Management Association, sponsored a stakeholders workshop on contract reform. The goals of the workshop were to inform stakeholders of the ongoing contract reform activities, solicit their ideas and support, and reinforce the Department's commitment to contract reform. Representatives of almost 100 firms interested in doing business with the Department attended. The program included panels of DOE officials and industry representatives. Topics addressed included performance-based contracting, new initiatives in contractor selection and award, labor issues, and industry perspectives.

E. Major Procurements and Continuous Improvement

By December 1996, 17 major contracts were performance-based management contracts, each with the full range of reform provisions.

With each new acquisition, the Department attempted to learn from previous contracts, so that each new one "pushed the envelope" of reform and incorporated lessons learned and best practices. The Department continues to analyze results and identify lessons learned from new approaches, strategies, and policies to ensure ongoing improvement.

SECTION II

ANALYSIS

Section II examines the status of the Contract Reform Initiative, the accomplishments to date, issues and challenges that remain. The data analyzed is from individual responses to a questionnaire distributed to Department of Energy headquarters and field staff, personal interviews, and reviews of other information such as solicitations, contract documents, policy statements, and statistical compilations. This analysis assumes that contract reform is, by its nature, evolutionary, and that it incorporates processes of lessons learned and continuous improvement. Although the analysis represents a "snapshot in time" along a continuum of ongoing and changing reform activities, some important events have occurred between the conclusion of data-gathering for this report and the completion of the report writing and review period. Wherever appropriate, the report takes into consideration such events. For example, in June 1997, the Department finalized a rulemaking, which was first published for comment in June 1996, and which amends the Department of Energy Acquisition Regulation to implement certain key recommendations of the Contract Reform Initiative.

The Office of Contract Reform and Privatization acknowledges some difficulties in identifying and quantifying contract reform data. The major contributors to these difficulties include the:

- Relatively short period of time that programs and sites have had in implementing contract reform;
- Ongoing concurrent fundamental changes in Department and program missions;
- Implementation of the Strategic Alignment Initiative to restructure and downsize the Department; and
- Continuing reductions in the Federal budget.

In some cases, difficulties also may be attributed to the absence of pertinent baselines or mechanisms for capturing or tracking contract reform data.

For organizational purposes, this section follows the 11 Basic Elements of Contract Reform (see Section I, "Overview of the Contract Reform Initiative", Table I-1), which embody the 48 action items of the Contract Reform Team's report. The discussion under each element includes a reference to the action items relating to that element, but not all actions are specifically discussed. The importance and impact of the individual action items vary widely and, for the purpose of this self-assessment, it was believed that organization around the Basic Elements would be more useful. Finally, to the extent that the discussions of some of the contract reform Basic Elements are more limited than others, it is the result of the unavailability of pertinent information, rather than any reflection of their significance.

A. Increased Competition

Summary of Historical Practices

From the early 1950s until the Contract Reform Initiative, DOE management and operating contracts were subject to specialized rules that favored noncompetitive extensions of incumbent contractors. Competitive award of these contracts was rare. As a result, many of the same contractors continued to perform at sites for decades.

Over the four decades preceding the Contract Reform Initiative, there were only 21 competitive contract awards for the management and operation of major sites and facilities despite numerous opportunities for competition. Furthermore, almost a third of the competitive awards that did occur resulted from the unwillingness of the incumbent to renew the contract (e.g., Union Carbide at Oak Ridge in 1984, DuPont at Savannah River in 1989, and AT&T at Sandia in 1993).

Even when management and operating contracts were competed, the selection focused on the contractor's demonstrated competence and experience in managing and operating nuclear weapons production facilities and laboratories (e.g., reactor operations, weapons production and testing). This practice favored incumbent contractors and discouraged new firms--with perhaps more innovative and more cost-effective approaches--from competing. In addition, the practice of extending existing contracts before new terms and conditions were negotiated greatly reduced the Government's bargaining power in the negotiations.

Also, DOE historically encouraged management and operating contractors to retain work "within the fence," that is, most of the work scope was performed by the management and operating contractor employees. Although this practice was consistent with Cold War security interests, it was not an effective business practice. The Contract Reform Team's action items relating to increased competition are shown in Table II-1.

Table II-1

Contract Reform Action Items Relating to Competition

Objective of Action Item	Deliverable
Obtain quality performance at the least cost, consistent with Departmentally approved program-specific factors.	Policy and program-specific criteria regarding DOE "Make-or-buy" decisions.
Require management contractors to prepare "make-or-buy" plans.	Contractual requirements and associated incentives for an annual "make-or-buy" plan.

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Contract for routine services at the lowest practicable cost.	Plan for each site to increase its use of fixed-price contracts and subcontracts for tasks that can be acquired on a fixed price. Plan must include a schedule, the identification of pilot sites, and must address workforce displacements.
Except in unusual circumstances, automatically compete management contracts after no more than one extension.	DOE policy emphasizing competition.
Negotiate the terms of extended contract before making the extend decision, and make the decision-making process open to public scrutiny.	Revised extend/compete policy.
Develop evaluation and selection criteria that increase competition.	Guidelines that will increase competition.
Create a Procurement System Improvement Task Force to evaluate and streamline the Department's procurement process.	Report and recommendations to increase the speed, quality, and competitiveness of DOE procurement.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

Prime Contract Level

In October 1994, DOE published in the *Federal Register* Acquisition Letter 94-14, an interim policy regarding competition and extension of management and operating contracts. This interim policy established competition as the norm for performance-based management contracts--a new form of management and operating contract. Exceptions to competition were to be made only on a case-by-case basis, in exceptional circumstances, and only when authorized by the Secretary of Energy. The policy also permitted contract terms of up to five years with an option to extend the term, for an additional five years for competitively awarded contracts. DOE replaced the policies that favored noncompetitive extensions of management and operating contracts and balanced the benefits of a competitive environment with the recognition that long-term contractual relationships can facilitate superior performance.

After consideration of public comments on this interim policy, DOE published an Interim Final Rule in June 1996 which became final in June 1997, that made full and open competition a

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regulatory requirement (See Appendix D). The rule limited exceptions to competition to those permitted by the government-wide Competition in Contracting Act and only when approved by the Secretary.

This rulemaking formally affirmed DOE's commitment to full and open competition as the norm for management and operating contracts. Aided by this policy, DOE has, since 1994, made decisions to compete 11 management and operating contracts and to extend 15 management and operating contracts. To date, 8 contracts have been competed. Competitions for the other 3 contracts will be initiated within the next two years. (See Table II-2) In comparison, DOE initiated only 3 competitions involving management and operating contracts over the 10 years preceding contract reform. Three additional contracts were competed during this 10 year period when the incumbent decided to end its business relationship with DOE.

Table II-2

Major Management Contractor Competitions Since 1994 (\$Billions)

INEEL, Lockheed Martin	\$4.0
Hanford, Fluor Daniel team	\$5.2
Savannah River, Westinghouse team	\$6.6
Rocky Flats, Kaiser Hill team	\$2.7
Nevada, Bechtel	\$1.5
Oak Ridge (To be determined)	\$2.5
Mound, Babcock and Wilcox	\$0.75
Brookhaven (To be determined)	\$1.6
Total	\$24.85

These competitions also brought some new and diverse contracting parties into the DOE community. In addition, for these and future contract competitions, Source Evaluation Boards responsible for competing the contracts have employed techniques intended to expand the competitive base and strengthen DOE's negotiating posture. These techniques include:

- Extensive consultation with stakeholders before issuing formal solicitations;
- Selection criteria designed to minimize the advantages of incumbent contractors;
- Requests for comment on draft Request for Proposals; and

- Completion of contract negotiations with all proposers in the competitive range prior to contract award.

Introducing these techniques into the M&O system and encouraging new contracting parties produced interest and participation on a prime and major subcontract level by firms that had not generally participated in DOE procurements for management and operating contracts. Recent new participants have included CH2M Hill and Dyncorp at the Rocky Flats Environmental Technology Site, and GTS Duratek at the Hanford Site.

Subcontract Level

Make-or-Buy Decisions

DOE's 1997 Final Rule affects make-or-buy decisions. Under the new approach, DOE expects its contractors to operate its laboratories, weapons production plants, and other facilities more cost-effectively and to be consistent with long-term strategic objectives. Contractors are to develop and implement make-or-buy plans that establish a preference for providing supplies or services (including construction and construction management) on a least-cost basis, subject to program specific make-or-buy criteria. The emphasis of this make-or-buy structure is to eliminate bias for in-house performance where an activity may be performed at less cost or otherwise more efficiently through subcontracting.

Evaluating the impact of this policy across the DOE complex would be premature. Some DOE sites, however, have reported positive results. The aggressive implementation of make-or-buy programs at the Savannah River Site in FY 1994 and FY 1995, for example, yielded savings of over \$800,000 out of subcontracts valued at more than \$24 million. In addition, make-or-buy programs at Savannah River Site have achieved a reported cost avoidance of approximately \$116 million by obtaining contaminated clothing laundry services from the private sector, and by partnering with a local combine of municipalities to develop a new sanitary landfill. The Savannah River Site contaminated clothing laundry facilities, constructed in the early 1950s, were due to be replaced. Commercial facilities had become available and a make-or-buy analysis indicated that these services could be safely obtained in the private sector. Utilizing services available in the commercial marketplace enabled cancellation of a planned \$13 million project to construct a new facility.

With respect to the sanitary landfill, environmental compliance requirements indicated the need to develop a new landfill at the Savannah River Site. A construction project estimated at \$103 million was planned. However, consultation with neighboring communities revealed a common need for sanitary landfill facilities. Instead of a DOE project, the local municipalities developed a plan to build the landfill on Savannah River Site property using the bonding authority of the municipalities. The landfill is under construction and the Savannah River Site

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will be one of an estimated dozen customers paying for disposal on a unit price basis. This effort resulted in a \$103 million cost avoidance.

Increasing Competition

To evaluate contract reform's impact on subcontractor competition, the Contract Reform Project Office requested statistics on competition at the subcontract level from field offices. Most field offices replied that DOE did not track the data requested and that extensive research would be required to obtain the information. Other field offices replied with preliminary data revealing varying degrees of increased competition at the subcontract level. For example, Argonne National Laboratory reported an increase in competitive subcontracts from 88% in FY 1995 to 95% in FY 1996. While competition is increasing at the subcontract level at certain sites, DOE does not have sufficient data at this time to draw conclusions about comprehensive results across the complex.

Teaming Arrangements and the Management and Integration Contract

DOE has structured a number of recent competitions for management contracts (e.g., Rocky Flats Environmental Technology Site, 1995; Hanford Site, 1996; and Savannah River Site, 1996) to foster teaming arrangements, which are characterized by a proposed prime contractor and several major specialty subcontractors.

One type of teaming arrangement contract is the management and integration contract. Under this type of contract, a contractor with specialized project integration skills manages the site, overseeing and integrating the work performed by a range of specialized subcontractors. At the Rocky Flats Environmental Technology Site, for example, the management and integration contractor assigns work to subcontractors who were chosen at the time of the prime contract award on the basis of their demonstrated "best-in-class" expertise in work areas fundamental to site activities. This approach is in contrast to the traditional management and operating contract where the prime contractor performed most of the work at the site, even though its principal expertise often was in one area, e.g., nuclear operations.

Management and integration contracting is also in place at the Hanford Site. At this site, the prime contractor, Fluor Daniel, uses teaming arrangements with "best-in-class" members with a focus on strategic partnerships. Building on the Rocky Flats' experience where team members were selected for the duration of the prime contract, Hanford designed its contract to provide for an initial term of two years for major subcontracts. This provision allows the replacement of team members evidencing inadequate performance, thereby maintaining competitive pressure to obtain superior performance during the five-year contract team.

At the Savannah River Site, DOE employs a different form of the traditional management and operating contract: the performance-based integrated team management approach. Known as "Integrated Team Management of the Savannah River Site," this contract involves a single lead company with three subcontractors whose functions are totally integrated into site operations. All companies operate under a common set of procedures, policies, and practices. There is no duplication of normal administrative functions (e.g., finance, procurement) and no separate fee for the subcontractors. All four companies share in the fee earned by the prime contractor through performance-based incentives and award fee evaluation criteria established under the contract.

As the implementation of management and integration contracting continues at these sites, DOE will be able to collect the information needed to determine the long-term effectiveness of these types of teaming arrangements.

Workforce Restructuring

One impact of the innovative contracting structures (combined with the new more rigorous make-or-buy policy and the need to reduce costs) has been the need to restructure the workforce at DOE sites. As a result, DOE is taking a significant interest in the human-resources policies of its current prime contractors as well as new contractors and subcontractors resulting from competitions and new privatization activities.

DOE's policy is to promote open, forthright, two-way communications with potentially affected employees, union representatives, and community leaders to develop options for dealing with and mitigating the impact of restructuring. Workforce restructuring should be accomplished in a manner that, to the maximum extent practical, mitigates the social and economic impacts on current employees and their communities.

To help in this restructuring effort, the Congress passed section 3161 of the National Defense Authorization Act for Fiscal Year 1993. Section 3161 includes objectives to mitigate the effects of work force changes at Department of Energy defense nuclear facilities, and requires development of work force restructuring plans when changes in the work force become necessary at these facilities. Consistent with Departmental policy and best business practices, the objectives of section 3161 are applied wherever DOE contractor work force restructuring takes place.

Contract Reform in Extended Contracts

Although competition at the prime contract level has increased, there are a significant number of contracts which DOE decided not to compete. Neither the Contract Reform Team nor the Department's new policy envisioned that every contract would be competed. In cases where a

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noncompetitive extension is sought, the new policy requires that DOE demonstrate that the noncompetitive extension is in the best interests of the government under authorities provided under the Competition in Contracting Act.

In those instances where extension was justified and supported based upon the statutory exceptions contained in the Competition in Contracting Act, DOE found that the specter of competition increased the contractor's commitment to innovation and cost reduction. All DOE decisions to seek extensions were conditional decisions and, in all cases, the conditions imposed included the incorporation of the full range of contract reform into the extended contract before the extension was finally granted. In every case, this changed the basis of negotiation. Rather than using the existing contract as the basis for negotiation, the Department developed administrative mechanisms to ensure that contract reform terms and conditions were the basis for negotiation. The net effect of this strategy was an extension of the existing relationship, not an extension of the existing contract.

It may be noted that the large majority of non-competed contracts were with nonprofit organizations. Of the 11 nonprofit contracts for which extend/compete decisions were made between February 1994 and April 1997, there were no compete decisions. Each of the 11 contracts was for the management and operation of a Federally Funded Research and Development Center (FFRDC) on behalf of DOE, and the appropriate exception under the Competition in Contracting Act was exercised. However, in May 1997, Secretary Peña announced a decision to terminate for convenience the contract with Associated Universities, Inc. for the operation of Brookhaven National Laboratory, and a competition to replace the contractor is underway. The Secretary made the decision after considering the results of a laboratory safety review conducted by the independent oversight arm of the DOE's Office of Environment, Safety and Health. In addition, the Secretary found unacceptable the disintegration of public trust in laboratory management.

The contracts with nonprofit organizations for which a conditional decision to extend was made are:

- Ames Laboratory - Iowa State University;
- Argonne National Laboratory - University of Chicago;
- Brookhaven National Laboratory - Associated Universities, Inc. (Earlier decision made in 1994);
- Fermi National Accelerator Laboratory - University Research Associates;
- Lawrence Berkeley National Laboratory - University of California;
- Lawrence Livermore National Laboratory - University of California;
- Los Alamos National Laboratory - University of California;
- Pacific Northwest National Laboratory - Battelle Memorial, Inc.;
- Princeton Plasma Physics Laboratory - Princeton University;

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- Stanford Linear Accelerator Center - Stanford University; and
- Thomas Jefferson National Accelerator Laboratory - Southeastern University Research Associates.

The conditional decisions to extend have been finalized for six of the 11 contracts. The five contracts for which a final decision is pending the outcome of negotiations as of September 1, 1997 are: Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Pacific Northwest National Laboratory, and the Stanford Linear Accelerator Center.

A close examination of these extend decisions shows that the new competition policy was, in fact, applied in every case. As noted above, the new policy requires that DOE demonstrate that all noncompetitive extensions are in the best interests of the government and fall within the government-wide exceptions stated in the Competition in Contracting Act. Accordingly, DOE subjected each decision to a rigorous examination of the facts and circumstances. These facts and circumstances included, but were not limited to:

- Contractor ownership of the land on which the facilities are located, which limited the ability to compete the contract (e.g., Ames Laboratory [1996];
- An incumbent contractor comprising a consortium that included most of the known sources of expertise required to perform the site mission. (e.g, Fermi National Accelerator Laboratory [1996]; Thomas Jefferson National Accelerator Laboratory [1995]); and
- Budget cuts which have made the viability of the entire research program questionable (e.g., Princeton Plasma Physics Laboratory [1996].

Issues and Challenges

Addressing Nonprofit Contracts

It is DOE policy to employ the full range of contract reform concepts and methods, including competition, in its contracts for the management of major facilities in order to improve contractor performance and cost effectiveness. This policy is applicable to both for-profit and nonprofit contracts.

Nonprofit contractors have expressed concerns about the fact that the competition policy is essentially the same for both for-profit and nonprofit organizations. Their concerns focus principally on the 10-year normative contract duration and the high cost of competing. They contend that the 10-year term would have the following impacts:

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- Provide insufficient time to carry out many basic research projects that can take decades to complete and might suffer from contractor changeover;
- Make it difficult to attract and retain high caliber personnel;
- Discourage industry from entering into technology transfer partnerships; and
- Endanger long-standing local commitments and involvement.

One of the approaches DOE has considered in response to these concerns is to implement, in appropriate cases, an alternative competition procedure for educational institutions and other nonprofit organizations that is simpler, faster, and less costly.

The Department's experience in 1997 with the Brookhaven competition should provide additional insight into the application of this approach to the concerns expressed by nonprofit contractors. An alternative competition procedure is, in fact, being utilized for this procurement and the effectiveness of this procedure will need to be assessed. Also, the impact of competition on research, attraction and retention of high caliber personnel, technology transfer partnerships, local commitments, and overall laboratory performance must be assessed.

Implementing Management and Integration Contracts

Preliminary reports on the effectiveness of management and integration contracting are generally positive and point to the significant role this approach can play, but also conclude that the concept is maturing slower than expected. According to a study by the DOE Rocky Flats Office, some of the reasons contributing to the concerns in this area are:

- The integrator's role is still being defined; and
- There are staffing and communication difficulties within the integrating organization and between the integrator and the subcontractors (complicated by corporate rivalry for a "piece of the pie").

Addressing Worker Transition Issues

As the Department implements new contracting strategies, experiences further mission changes, and deals with decreasing budgets, workforce restructuring will continue to be needed. Provisions are being included in work force restructuring plans with respect to treatment of workers affected by changes in contracting strategies. The Department's Office of Worker and Community Transition is the designated point of contact for labor policy issues. This office works with DOE Headquarters and field organizations to coordinate the Department's efforts to respond to worker issues related to contract reform. DOE managers, in concert with the Office of Worker and Community Transition, can help in this effort by

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encouraging contractors to consider ways to minimize impacts on affected employees, the community, and the operation of DOE sites. Some avenues that have been explored are:

- Involving employees from the beginning when identifying those productivity improvement programs and make-or-buy analyses for improving performance and reducing costs that can be independently verifiable; and
- Ensuring that when work is contracted out, contractors comply with all applicable labor laws and regulations, including union recognition and successorship where appropriate.

The challenge of work force restructuring is to accomplish the transition in a manner that utilizes the skills and experience of the existing work force, and mitigates the social and economic impacts on current employees and their communities, to the maximum extent practicable.

Concerns Regarding Teaming Arrangements

While teaming arrangements have added new contractor participants and appear to have potentially beneficial effects, preliminary reports also indicate that some concerns exist with the full implementation of this concept. For example, when the Richland Operations Office competed the Project Hanford Management Contract, three teams proposed. Each team selected the best firms available as its subcontractors. Since DOE made only one selection, the teaming arrangement was limited to the prime contractor's chosen team. This impeded the site from using other potentially better qualified subcontractors who were members of other teams.

The concern is that setting up best-in-class teams before contract award may force the integrating contractor to choose subcontractors too early. As a result, this may not ensure best-in-class, on-site performance over the life of the contract because of changes during the contract period in the nature of the work, company capabilities, or personnel. One possible approach that may help to address this issue is to have the prime contractor competitively select subcontractors after award of the management and integrating contract. This would provide greater flexibility as site missions evolve and differing skills are needed. This approach is included in the solicitation for the Oak Ridge Environmental Management contract. Another possible approach, already employed at the Hanford Site is to limit the term of major subcontracts to two years with extension contingent upon the quality of performance.

The best approach may differ from site to site because of variations in site missions. Consequently, the challenge for DOE, at least in the short-term, will consist of maximizing the benefits of teaming arrangements while minimizing or avoiding any potential adverse impacts

on contract performance. (See also, section II. F. on environment, safety, and health issues).

B. Increased Use of Fixed-Price Contracts

Summary of Historical Practices

The Department traditionally relied on cost-reimbursement contracts, particularly at the prime contract level, as the preferred method of acquiring goods and services. Although this contracting vehicle yielded cutting-edge technological advances in both the defense and civilian scientific areas during the Cold War era, the contract statements of work were very broad and the Government assumed virtually all financial and performance risks for projects. Contractors had little incentive for cost or schedule control because virtually all costs were reimbursed.

As part of its review, the Contract Reform Team found that certain functions could be more efficiently accomplished by arrangements in which delivered goods and services were provided on a fixed-price or unit-price basis. In the Team's view, fixed-price contracting had the advantage of placing performance risks on the contractor, so that the contractor, rather than DOE, paid for inefficiencies that increased the total cost of performance. Nevertheless, the Team also recognized that this type of contractual arrangement is suitable only when statements of work can be defined with precision. They also noted that fixed-price contracts are particularly appropriate when the cost of the work can be estimated with a fair degree of accuracy based on past experience with other contracts or by comparisons in the commercial marketplace. The Contract Reform Team's action items relating to fixed-price contracting are shown in Table II-3.

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Table II-3

**Contract Reform Action Items Relating to
Increased Use of Fixed-Price Contracts**

Objective of Action Item	Deliverable
Review current M&O contracts and identify discrete tasks for fixed-price contracts and subcontracts.	Site by site assessment of work requirements that identifies the supplies or services that may be obtained by other than a cost reimbursement contract. A plan for each site to increase its use of fixed-price contracts and subcontracts for tasks that can be acquired on a fixed price. The plan must include a schedule and the identification of pilot sites and must address workforce displacements. A plan to test the effectiveness of using fixed-price contracts and subcontracts and acquiring selected goods and services on a "least cost" basis.
Test the effectiveness of using fixed-price contracts.	

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

Responses to the self-assessment indicate that DOE sites are using fixed-price contracts in new situations and with increasing frequency, particularly at the subcontract level. For example, at the Savannah River Site, fixed-price contracting has increased substantially. Using a Fixed-Price Subcontracting Initiative as a framework, the site directed the management and operating contractor to identify functions or existing cost reimbursement subcontracts that might be suitable for subcontracting on a firm fixed-price basis. Tied to this was a performance goal for FY 1996 requiring that 82 percent of subcontracting dollars be awarded on a firm fixed-price basis. As a result of this initiative, nearly 94 percent of the site's actual FY 1996 subcontracts were procured on a fixed-price basis.

Increases in the implementation of fixed-price contracting also have been recorded at other DOE sites. For example, at the Fernald Site, 94 percent of FY 1997 subcontracts are fixed-price. At

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the Mound Site, the performance goal of a 10 percent increase in fixed-price subcontracts for FY 1996 as compared with FY 1995 was exceeded. At the Kansas City Plant, fixed-price subcontracts have accounted for 98 percent of subcontracts for the past two years. The Oak Ridge Reservation reports that 99 percent of all subcontracts awarded in FY 1995 and FY 1996 were fixed-price. The Sandia National Laboratory reported that it maintained the level of fixed price subcontracting at the 89 percent mark since FY 1994.

Achievements in fixed-price contracting also expand to the prime contract level. For example, contracts for the Tank Waste Remediation System at Hanford and for the Advanced Mixed Waste Treatment Project at the Idaho National Engineering and Environmental Laboratory are fixed-price arrangements involving work that had historically fallen within the purview of management and operating contractor work scopes. At the Waste Isolation Pilot Plant for FY 1997, approximately 22 percent (by cost) of the prime contract scope of work is performed on a firm-fixed-price basis, 66 percent is performed on a fixed-price incentive basis, and only 12 percent is performed on a cost-plus-award-fee basis. Prior to the contract reform initiatives in FY 1994, these contracts had been 100 percent cost-plus-award-fee.

Under fixed-price contract arrangements, DOE sites are now defining statements of work more clearly and incorporating specific deliverables with specific rewards. However, contractor performance under this new approach has not been without its problems. For example, the Pit 9 cleanup project, which was an early effort initiated at the Idaho National Engineering and Environmental Laboratory prior to the contract reform initiative, is currently more than two years behind schedule and the Department has been assessed \$940,000 in fines for failure to meet regulatory deadlines. In addition, the subcontractor, Lockheed Martin Advanced Environmental Systems (LMAES), has submitted to DOE a request for a \$158 million adjustment in the contract price and the restructuring of the contract to a "cost-plus" vehicle.

Departmental officials have testified that, based on DOE's extensive review to date, the fundamental difficulties encountered by the Pit 9 subcontractor stem from the company's insufficient application of technical and management skills to the project and the subcontractor's own management and technical decisions, rather than actions of the Department or its prime contractor at Idaho. Several other outside observers have expressed a similar view. In the DOE's view, there exists a valid fixed price contract, which Lockheed Martin Advanced Environmental Systems is expected to perform. However, at the same time, it is clear that the cleanup objectives of the Pit 9 project have not been met and that the ultimate cost of the subcontract will not be known until the final resolution of the subcontractor's claim.

Issues and Challenges

Ensuring DOE Staff Have the Ability and Resources to Apply and Administer Fixed-price Contracts

The use of fixed-price contracts requires knowledge of when fixed-price contracts are appropriate (and not appropriate), cost and pricing expertise, ability to develop detailed statements of work with clearly defined deliverables and acceptance criteria, and adequate resources for pre-award and post-award activities, e.g., preparing Requests for Proposals and Requests for Quotations, negotiating and issuing change orders. The DOE and the Congress must assure that necessary funding is available to support DOE in-house expertise in these areas. Without addressing these needs, it may be difficult for DOE to realize the full benefits of fixed-price contracting, particularly in complex areas such as waste management and environmental restoration.

Changing DOE Culture

Prior to contract reform, DOE contracting and technical staff generally did business under contractual arrangements, where DOE was free both to request the contractor to perform tasks, and to direct the manner in which such tasks would be performed. Contracting on a fixed-price basis requires a new way of thinking by DOE staff who no longer can assign tasks or make work changes without being subject to stringent administrative controls. Fixed-price contracting also requires more focus on results and less focus on process.

Assuring Effective Use of Fixed-Price Contracts

It is crucial that fixed price arrangements be used only in appropriate circumstances. Otherwise, the contracts may be characterized by frequent and substantial change orders, resulting in significantly higher actual costs. The Department should undertake periodic reviews to assess the effectiveness of its fixed-price contracting applications.

C. Performance-based Contracting

Summary of Historical Practices

DOE's traditional management and operating contracts often contained overly broad work statements; lacked clear, objective standards to measure performance; failed to include meaningful incentives for motivating contractors to achieve superior performance; and emphasized processes rather than results.

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In a significant departure from traditional approaches, the Contract Reform Team recommended the performance-based management contract as a new form of management and operating contract. This type of contracting technique employs performance-based concepts to define measurable standards of performance in a way that facilitates DOE's ability to evaluate contractors and to provide performance incentives and disincentives. This approach is consistent with government-wide initiatives to improve performance as articulated in the 1991 Office of Federal Procurement Policy, Policy Letter 91-2. This letter stated:

"Performance-based contracting structures all aspects of an acquisition around the purpose of the work to be performed as opposed to either the manner by which the work is to be performed or broad and imprecise statements of work."

In its 1994 report, the Contract Reform Team also urged development of a Department-wide incentive program for contractor cost-reduction and cost-avoidance programs. The report suggested that these programs build on efforts already underway at some DOE sites that allowed the contractor to share in savings realized by the Department through the adoption of valid contractor proposals. (Cost reduction programs are discussed under Paragraph D of this Section III.) The Contract Reform Team's action items relating to performance based contracting are shown in Table II-5.

Table II-5

Contract Reform Action Items Relating to Performance Based Contracting

Objective of Action Item	Deliverable
Performance Criteria and Measures; Results Oriented Statement of Work	
Develop programmatic performance criteria and measures.	A matrix of generic and programmatic performance criteria and measures.
Develop business management criteria and measures.	A matrix of generic performance criteria and measures.
Establish procedures for the development and use of performance criteria and measures.	Guidelines for the implementation of performance criteria and measures in the contracting process.
Train DOE program personnel in performance-based contracting.	Plan for training personnel in performance-based contracting.

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Create and implement tailored incentives for Performance-Based Management Contracts.	For-profit and nonprofit contractor incentive mechanisms.
Develop Department-wide guidelines for coordination of contractor oversight programs.	Guidelines for coordination of contractor oversight.
Establish effective contract performance measures for real and personal property management and accountability.	A matrix of generic and specific performance criteria and measures.
Performance-Based Incentives	
Establish an appropriate management fee policy for nonprofit organizations.	Revised fee policy, identify pilot solicitation(s), and contract to validate.
Establish compensation incentives for senior nonprofit laboratory personnel.	Performance-based incentive compensation policy for senior laboratory personnel.
Develop a DOE-wide incentive program for the contractor cost-reduction/cost-avoidance programs.	Policy guidelines and implementation plan
Use multiple-fee arrangements in performance-based management contracts.	Policy guidelines on the use of multiple-fee arrangements.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

In implementing performance-based contracting, DOE provided initial, general policy and guidance on performance-based contracting concepts in a number of ways. First, a *Report on Contract Reform Actions 3, 4, 5, 6, 8, and 14: Performance Criteria, Measures and Incentives* (February 1995) was prepared which contained a matrix of generic, business, and programmatic contracting performance criteria and measures and procedures and guidelines for implementing them. It described for-profit and nonprofit contractor incentive mechanisms including generic and specific performance criteria and measures for real property, personal property management, and accountability. Second, in April 1995, DOE issued Acquisition Letter 95-04 which stated:

“It is the policy of the Department of Energy to use, to the extent practicable, the full range of performance based concepts and methods in its contract requirements...Through the use of performance based contracting methods, the Department should realize improved contractor performance and greater accountability...”

Third, during the 1994 and 1995 time-frame, model contract provisions (as discussed in Section I. Overview) were developed for both nonprofit and for-profit contractors. These provisions served as the starting point for negotiations of many of the new performance-based contracts. And finally, training on *Performance-Based Management Contracting* was developed and initiated during 1995.

However, the policy and guidance was not only general in nature, but came after some performance-based contracts were negotiated, and concurrently with the negotiation of many other performance-based contracts. Much of DOE's time and resources were spent on (1) preparing solicitations and draft contracts which contained performance-based, results-oriented statements of work; (2) developing criteria and measures to assess the quality of performance in the new contracts; (3) developing new fee and incentive arrangements; and (4) negotiating and awarding the new contracts. The result was that, by the end of Calendar Year 1996, DOE had converted 17 traditional management and operating contracts to performance-based management contracts containing the full range of contract reform provisions.

Currently, DOE is continuing to convert its traditional management and operating contracts to performance-based management contracts as they are either competed or extended. DOE is also continuing to address policy needs--fee policy in particular. As part of contract reform, DOE has implemented differing fee arrangements throughout its sites. To optimize future fee arrangements and to take advantage of lessons learned, the Office of Procurement and Assistance Management is developing an updated fee policy. Once developed, this policy will undergo rulemaking. It will seek consistency of efforts among programs and sites, and focus on such contract reform objectives as: creating and implementing tailored incentives and incentivizing superior performance while discouraging substandard work.

The effectiveness of the new performance-based management contracts is a major focus of this Self-Assessment. Preliminary data indicate that these contracts have contributed to measurably better performance. However, a number of problems in implementation also have surfaced. The following sections address the Self-Assessment findings in these two areas.

Improved Performance and Other Benefits

DOE sites with significant experience and which have provided a fair amount of data include the Rocky Flats Environmental Technology Site, the Hanford Site, the Idaho National Engineering and Environmental Laboratory, and the Kansas City Plant.

As Table II-6 shows, the **Rocky Flats Environmental Technology Site** is a DOE facility where significant performance improvements have been accomplished under the performance-based contract.

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Table II-6

**Comparison of Performance Improvements Between the
Management and Operating Contract and the Performance-Based Contract
at the Rocky Flats Environmental Technology Site**

Contract Reform is Working at Rocky Flats		
<i>The following is a comparison of work accomplished under the old Management and Operations (M&O) contracting system with work accomplished the first year under the new performance-based contracting approach.</i>		
	Old M&O System July 1, 1994 - June 30, 1995	YEAR ONE New Performance- Based Approach July 1, 1995- June 30, 1996
Plutonium/uranium solutions tanks drained	4	10
Plutonium oxide stabilized	17 kilograms	36 kilograms
Residue drums vented	400 drums	1,807 drums
Low-level (LL) and LL mixed wastes shipped	15,200 cubic feet	39,783 cubic feet
Environmental cleanup areas closed out	1	2
Major contamination sources removed	0	2
Contamination "hot pots" removed	6	9
RCRA tanks stabilized	0	6
Brushing and repacking plutonium oxides	386 items	750 items
Plutonium/uranium solution stabilized	422 liters	924 liters
Special nuclear material shipments	2	11
Beryllium shipped	0	40,000 pounds
Building/facilities D&D and removed	0	6
More done with less budget and fewer employees...		
Contractor budget	\$650 million	\$550 million
Number of contractor employees	6,000 employees	4,400 employees

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The activities listed in this table represent significant accomplishments toward the achievement of the Rocky Flats closure mission. Some of these activities represent important steps in the clean-up mission, particularly the off-site shipments of special nuclear materials (SNM), beryllium, and low-level and low-level mixed wastes. Other activities (brushing/repackaging of plutonium oxides and residue drum venting) reduced immediate risks to the site workforce. Finally, some of activities were important first steps in environmental restoration of the site and the deactivating and decommissioning (D&D) of the site. These activities include "hot spot" removal, close-out of environmental clean-up areas, and the D&D of many buildings.

The **Hanford Site** reported that the adoption of an aggressive performance incentive program since FY 1995 has accelerated cleanup and facilitated significant cost reductions. Among other things, the Hanford Site has:

- Developed an innovative deactivation approach at the PUREX facility, accelerating project schedules by sixteen months and saving a total of \$77 million;
- Deactivated the Uranium Oxide Plant four months ahead of schedule, with an immediate savings of \$2 million in deactivation and maintenance costs, and a reduction in long-term annual maintenance costs from \$4 million to \$40,000;
- Reduced liquid volumes in the Hanford Tank Farms through operation of the Evaporator Facility, creating 27 million liters of additional storage space and allowing cancellation of \$300 million in new storage tank construction;
- Reduced Hanford Site overheads by \$200 million annually over two fiscal years; and
- Decontaminated the 183 H Basin, avoiding more than \$20 million in mixed waste disposal costs.

The **Idaho National Engineering and Environmental Laboratory** reported that performance incentives are proving to be effective tools. Specific performance incentives, added in a 1994 contract, are credited with the following accomplishments at the Advanced Test Reactor:

- Operating efficiency is the best since 1969;
- Operating costs are the lowest since 1991;
- Unplanned outages are the lowest in eight years; and
- Radiation exposure is the lowest in history.

The use of incentive fees at the **Kansas City Plant** since April 1995 has contributed to reducing total safety case incident rates to one of the best in DOE (based on the FY 1996 Performance Indicator Report and the Quarterly Safety Performance Report) and to a level that

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is a benchmark for industry. The DOE Kansas City Area Office also reports that a performance-based management contract allows DOE to tie performance to national and agency initiatives such as waste minimization, and the Kansas City Plant has significantly reduced hazardous waste generation, i.e., a 40% reduction since FY 1995. Furthermore, despite a declining budget, the site reports a sustained product delivery performance at 99.5 percent. In recognition of this accomplishment, the Kansas City Plant recently received the National Performance Review Organizational Hammer award.

The contracts discussed above represent some of DOE's earliest efforts to implement performance-based management contracts. The Department is already taking advantage of the lessons learned from these efforts. Although too recent to measure concrete results, the Project Hanford Management Contract, awarded in August 1996, built on these lessons learned. The contract is performance-based with a project management focus. A key feature of the contract is the linking of programmatic and site strategic goals to contract performance goals. Additionally, this was the first time that a DOE competition for a major site contract included specific performance objectives and measures in the competitive solicitation.

In linking programmatic and site strategic goals to contract performance goals, the Project Hanford Management Contract is an example of how performance-based contracting has helped to spur improved strategic planning within the Department. Another example is the contract for management of the Savannah River Site. During the development of both the Savannah River Site and Hanford Site management contracts in 1995-96, Headquarters and field personnel focused intensively on defining long-term site goals and milestones and developing specific performance measures and incentives related to those goals. Improved strategic plans for these sites should provide benefits well beyond the scope of the procurement process.

The incentives at the Savannah River Site have helped to focus Savannah River's efforts to advance strategic environmental management goals in a number of projects. For instance, by providing incentives for increased canister production at the Defense Waste Processing Facility, the site expects to reduce life-cycle costs by closing the facility ahead of schedule, thereby saving maintenance and surveillance costs in future years.

In addition to spurring improved strategic planning, performance-based contracting also has resulted in a greater exchange of performance information between DOE and contractors. DOE officials report this has resulted in a better sense of control and shared accomplishment with the contractors in incentivized areas. One example of this better control is the Cost Reduction/Cost Avoidance program at the Bartlesville Project Office. In 1995, the office implemented an initiative to maximize cost savings by the management and operating contractor. These cost savings are tracked and reported in joint monthly meetings between DOE and contractor staff.

This initiative has resulted in over \$3.4 million of cost savings -- approximately five percent of the total amount obligated by DOE during 1995.

Implementation Problems

Implementation of performance-based contracting is clearly an evolving process that is yielding benefits to DOE. However, DOE recognized that changing 50 years of contracting practices would be a difficult task, and reviews by both the Department and others indicate some significant implementation problems. Throughout 1995 and 1996, DOE management became increasingly aware of certain problems in the implementation of performance-based incentives and began to initiate actions to address these problems. For example, in March 1996, the Office of Environmental Management (EM) chartered the Fee Incentive and Analysis Team to recommend guidelines for fee and performance incentives that could be applied by field offices; identify best fee and incentives practices to promote improved contractor performance; and support the development and implementation of Department-wide policies. Although the Team focused on Environmental Management contracts, representatives of other DOE organizations (i.e., Energy Research and Defense Programs) participated in this effort and benefited from its activities. The team's initial draft report was issued in October, 1996, and in July 1997, the Assistant Secretary for Environmental Management provided direction to EM sites to use the proposed guidance in the development of Fiscal Year 1998 performance measures and incentives.

In mid-1996, the Manager of the Richland Operations office directed a review of seven performance incentives in response to problems identified by the Assistant Manager for Tank Waste Remediation. This internal review followed a June 1996 "near miss" incident in which the contractor compromised quality and safety to meet the schedule for performance incentive payment on an air compressor upgrade. As a result of its internal review, Richland initiated action to recover \$410,870 in fees and penalties from the contractor.

In March 1997, DOE's Office of Inspector General (IG) issued a report entitled, *"Inspection of the Performance-Based Incentive Program at Richland Operations Office."* This report built on the results of Richland's own internal review and identified numerous weaknesses in the implementation of the Fiscal Year 1995 Performance Based Incentive (PBI) Program at Richland, including the lack of any specific written policies or procedures for the management and administration of an incentive fee program, the lack of an audit trail for the review and approval of specific PBIs, unclear rationale for the selection of PBI Performance Objectives, a lack of justification for PBI fee amounts, and unclear PBI work scope and acceptance criteria. The IG concluded that the FY 1995 program at Richland "had not always made the best use of incentive dollars paid to the M&O contractor." Specifically, the IG found:

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- An instance where the PBI fee paid was excessive when compared with the actual cost to perform the PBI work;
- Instances where PBI fees were paid for incomplete work;
- Instances where PBI fees were paid for work that was accomplished prior to the establishment of the PBI Program at Richland;
- Instances where PBI fees were paid for work that was easily achieved; and
- An instance where the M&O contractor compromised quality and safety to achieve a PBI fee, resulting in a "near miss" incident that endangered maintenance personnel.

Immediately following the DOE's receipt of the IG's report on the implementation of the FY 1995 Richland PBI program, Deputy Secretary Charles Curtis sent a letter to the Inspector General summarizing a series of actions that the Richland Operations Office and the Department had undertaken to address the problems in performance-based contracting identified by DOE management and the IG report. These actions included, among other things, an intensive workshop with senior procurement officials on performance-based contracting and an aggressive effort by the Richland Operations Office to recover questioned FY 1995 and 1996 fees, where appropriate.

In addition, on March 19, 1997, the Secretary of Energy announced that a comprehensive review of performance-based contracts would be conducted by the Office of Procurement and Assistance Management to ensure that performance measures across the Department are well-defined, that incentives are rational and appropriately awarded, and that contractor performance-against-objectives are properly administered. This intensive review is nearing completion.

Issues and Challenges

Experiences at the Hanford Site illustrate some of the issues and challenges facing DOE in fully implementing its performance-based contracting strategy. Workshops and reviews indicate that these problems are not unique to the Hanford Site, and that systemic problems and other deficiencies exist in both the construction of incentives and in the administration of incentive programs. Key issues and challenges include:

Addressing Performance-Based Fee and Incentive Issues

As results become available from the Office of Procurement and Assistance Management's Department-wide review of performance-based contracts, as well as other reviews and audits, DOE will need to ensure that strong and disciplined follow-up measures are taken to address findings. Further, lessons-learned and best practices must be regularly identified and

communicated throughout the DOE complex. These efforts will require a team approach between Headquarters and the field.

Need for Adequate Training

Field offices, in assessing contract reform progress, generally identified the lack of training as a barrier to the successful implementation of performance-based contracting. Implementation, while aggressive, has been difficult in some cases because of the Department's relative short history in using performance-based methods. Some DOE programs report experiencing delays in instituting performance measures and have found that significant amounts of training and implementation are still required to complete the transition to performance-based contracting. There is a tendency to develop too many measures and to focus on process, rather than on outcome. In some cases, DOE did not take into consideration all performance elements such as achievement of objectives, costs, and schedules. Training is needed to help staff identify the most important requirements. Although DOE develops and periodically offers training courses to personnel on a variety of contract reform issues, based on the data collected during this self-assessment, DOE staff continue to have training needs in at least the following three specific areas:

- Preparation of results-oriented statements of work;
- Development and administration of performance objectives, measures, and incentives; and
- Selection, award, and administration of multiple fee arrangements.

Need for Headquarters/Field Team Approach

From time to time, DOE Headquarters program offices have developed performance measures (as distinguished from guidance on their development) and recommended their use by field offices for both the prime contract and subcontract level. However, Department-wide application of standard performance measures is not always beneficial, may divert the contractor from strategic goals, and may even be counterproductive in certain situations. Headquarters and field offices must work together in a team approach to assure that performance measures and incentives are structured effectively while, at the same time, furthering strategic goals.

Development of Complex-wide Guidance

Field offices have requested guidance on certain areas of contract reform: developing performance measures, establishing fee and fee and fee structures, and validating performance. Specifically, there is a need for guidance on:

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- Developing performance-based incentives which include well-defined minimum performance requirements and acceptance criteria;
- Assessing what performance is worth in terms of cost, incentives, and benefits; and
- Establishing a relationship between incentivized requirements and all other requirements.

D. Cost Reduction

Cost reduction is a primary goal of contract reform, and most activities discussed in Section II are related to cost reduction in some greater or lesser degree. However, the Contract Reform Team targeted a number of specific areas for cost reduction or improved cost control. These included support services contracts, indirect costs, and cost reduction/cost avoidance programs in contracts. The Contract Reform Team's action items relating to cost reduction are shown in Table II-7.

Table II-7

Contract Reform Action Items Relating to Cost Reduction

Objective of Action Item	Deliverable
Use cost-sharing arrangements in Performance Based Management Contracts.	Policy that requires solicitation of cost-sharing arrangements in the selection process for new contractors; identification of pilot solicitation(s).
Identify DOE support services that can be cost-effectively performed by federal employees.	Plan to reduce program costs and improve program management by converting contractor positions to federal positions over the next three years.
Reduce support service contracting by at least 10 percent in fiscal years 1995-1997.	Plans for reducing support service contracting in fiscal years 1995-97.
Implement performance-based contracting methods for support service contracts.	Plan for conversion to performance-based support service contracts.
Initiate Department wide benchmarking of various indirect-cost categories against the "best in class" of public and private businesses and initiate planning for specific goals for reducing indirect costs.	Report on specific goals and benchmarks and implementation plan.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Support Services Contracts

Summary of Historical Practices

Between FY 1980 and FY 1993, DOE's annual expenditures for support service contracts increased from \$88 million to \$768 million, as the DOE budget grew from \$15.4 billion to \$23 billion. In FY 1994 and FY 1995 approximately 33 percent of all DOE contract funds, excluding management and operating contract funds, were obligated for support services. This trend reflected the need to obtain new, specialized expertise as missions changed. However, this increasing reliance on contractors raised a number of concerns, including:

- The cost effectiveness of using cost-reimbursement contracts for support services;
- Contractors performing inherently governmental functions; and
- A significant increase in DOE's contract management responsibilities.

As part of its evaluation of DOE's contract reform policies and practices relating to support services contracts, the Contract Reform Team recommended that DOE improve work efficiency and performance by reducing support service contractors. The Team suggested that this objective should be accomplished by evaluating the functions support services contractors performed and determining if these functions could be better accomplished by DOE employees.

Implementation

The Department organized a team to compare use of Federal full time equivalents versus support service contractors. In August 1995, the team issued a three year plan to convert contractor positions to federal positions with implementation to be in conjunction with the Secretary of Energy's Strategic Alignment Initiative.¹ Since issuance of the plan, DOE has aggressively and successfully reduced the number of its support service contracts.

In addition to the recommendation to reduce the number of support services contracts, the Contract Reform Team recommended a goal of reducing support service contracting expenditures by at least 10 percent in FY 1995-1997. To implement this goal, DOE established

¹ The Secretary's Strategic Alignment Initiative was introduced in 1994 after release of the 1994 DOE Strategic Plan. Five areas were targeted for cost savings: Federal staffing, support service contracting, information management, travel, and office closings.

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a target reduction of \$90 million for FY 1996 and significantly exceeded it with a \$184 million reduction.

The Department also has begun to implement performance-based contracting methods for support service contracts. Following the publication of the Contract Reform Team report, DOE volunteered to participate in a pilot project with the Office of Federal Procurement Policy to implement performance-based contracting methods for support service contracting. As a result of this pilot effort, DOE issued two reports (*Plan for Implementing Performance-based Support Service Contracting* in October 1994 and *Draft Guide for the Preparation of Statements of Work* in November 1994) specifically designed to address the Department's performance-based support service contracting practices.

DOE's protective services contract at Argonne National Laboratory was part of this pilot project, and it demonstrates the successful application of this contract reform initiative. In 1995, DOE converted a sole-source Small Business Administration Section 8(a) cost-plus-fixed-fee contract to a competitive Section 8(a) firm-fixed-price contract that included a not-to-exceed-time-and-material component with fixed-price labor. The Department projected savings at approximately \$400,000 annually due to this change. At the same time, the Department continued to receive quality service, shifted risk to the contractor, and provided the contractor a greater incentive to manage costs effectively.

DOE is actively converting many other support service contracts to performance-based contracts in other program areas as well. For example, contract reform features (e.g., incentive fees, fixed price task orders) were added to the recently awarded Department-wide support service contract for preparation of Departmental documents related to the implementation of the National Environmental Policy Act.

Indirect Costs

Summary of Historical Practices

Indirect costs include most of the costs of functions such as maintenance and utilities. Past reviews of DOE's indirect cost practices indicated that these costs consumed a large portion of DOE's site-wide budgets. However, there was no consistent information available to understand the nature and magnitude of these costs. Although many cost reviews were performed by DOE program managers and others, these reviews were not based on cost data that was reported on a consistent basis across all sites. These reviews were uncoordinated, often duplicative unnecessarily costly and, time consuming and often ineffective.

Implementation

To address these shortcomings, the Functional Support Cost Report System (FSCRS) was developed in FY 1995/1996 by the Headquarters Chief Financial Office, the Office of Environmental Management, and the Financial Management System Improvement Council, with later participation by the Office of Defense Programs and the Office of Energy Research. It was initially determined that focusing only on the indirectly funded portion of functions would miss many cost savings opportunities. Therefore, the scope of the initiative was expanded to cover the total cost of supporting these functions, whether funded directly or indirectly. The resulting system now provides, at a relatively low cost, a cost management tool that gives DOE program officers, DOE field office managers, and contractor managers functional support cost data prepared on a consistent comparable basis across the Department. The system covers 22 sites, including most major sites in the Department.

Outside of Functional Support Cost Reporting efforts, there have also been a number of benchmarking initiatives, particularly in the areas of environment, safety and health, safeguards and security, and maintenance - the largest cost drivers among the functions tracked by the Department. Additionally, best practices for many are also being collected and shared among contractor sites. As a result of the Department's increased emphasis on functional support cost reduction, the cost of these functions at the 22 sites was reduced by a total of more than \$600 million from FY 1994 to FY 1996. Additional reductions are anticipated in FY 1997 and FY 1998.

Cost Reduction/Cost Avoidance Programs

Summary of Historical Practices

Since 1985, some of the DOE's field offices have tried cost reduction/incentive programs of various types and durations, with marginal success. DOE's inability to validate these earlier cost savings, the absence of policies on cost reduction, and the lack of reliable baselines contributed to the lack of success. Furthermore, costs "saved" were not always tangible, nor within the ability of the Department to reallocate or de-obligate from the contracts. The need was recognized that savings must be in actual dollars which could be returned to the direct control of DOE. A DOE working group reviewed this issue and concluded that a cost reduction incentive program which would allow the contractor to share in savings that result from contractor initiated cost-reduction actions would motivate contractors to aggressively reduce costs.

In 1994, the Contract Reform Team noted the absence in DOE contracts of incentive programs for contractor cost reduction/cost avoidance. To address this concern, the Team recommended that these programs be consistently adopted throughout the complex and that DOE build on

efforts already underway at the Idaho National Engineering and Environmental Laboratory, the Rocky Flats Environmental Technology Site, and the Savannah River Site. In the view of the Contract Reform Team, these programs would further DOE's effort to develop cost reduction and avoidance approaches because of one fundamental element: the contractor was allowed to share in savings realized by the Department when validated contractor proposals were adopted.

Implementation

All major contracts awarded or renewed during the past three years contain a provision for contractor cost reduction programs. Typically, this contract provision (usually called "cost reduction incentive programs") encourages the contractor to develop, prepare, and submit cost reduction proposals for innovative improvements in processes or products. If the contracting officer accepts the proposal, the contractor may share a percentage of the net hard dollar savings realized in performing the work covered by the proposal.

The results of these contract provisions have been mixed. While for profit contractors have shown strong interest by submitting proposals, there have been problems in the acceptance and implementation of these proposals. As with earlier efforts, the lack of reliable baselines, as well as adequate cost information and financial systems, have made successful implementation difficult. With respect to nonprofit contractors, very few proposals have been submitted to DOE. Nonprofit contractors clearly are not responding to the cost reduction incentive program provision.

However, separate and apart from the cost reduction program provision, there have been numerous other cost reduction initiatives across the complex where success is being reported. Examples of such initiatives include:

- ***Oak Ridge Operations Office.*** In a cooperative effort with its prime contractor, Lockheed Martin Energy Systems, \$80 million of validated cost savings were reportedly achieved in FY 1996 from a special emphasis on cost savings within award fee. The total documented cost savings of the Columbus Initiative, originally a quality management effort, is more than \$450 million since 1993. Since its inception, the Columbus Initiative has been an ongoing cost-management process, continuously striving to find new, innovative ways to improve products and services and lower the cost of doing business;
- ***Argonne National Laboratory.*** The negotiated renewal of this contract with the University of Chicago included cost reduction initiatives that resulted in FY 1996 savings through the laboratory's Total Compensation Cost-Containment Program. This is a pilot program to eliminate DOE transaction-based compensation/benefits approvals and to allow the laboratory to share in

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savings from reductions in overall total compensation. The laboratory made significant cost-cutting changes to benefits and lowered salary increases. Chicago Operations Office's assessment of first year results show that the pilot program's goals were exceeded. Chicago reports that it anticipates first-year cost savings of approximately \$3 million with expected savings of approximately \$12 million over the life of the four-year program;

- ***Thomas Jefferson National Accelerator Facility.*** This site has implemented initiatives such as maximizing subcontracting services, streamlining CRADA processing, increasing the use of commercial procurement practices, duty free customs agreements for experimental equipment, and automated systems integration. Achievements to date contribute substantially to Jefferson's commitment to \$4 million of "Galvin Savings;" and
- ***Brookhaven National Laboratory.*** Cost savings occurred when the DOE Brookhaven Group worked directly with the New York Power Authority to negotiate an agreement to wheel power to the laboratory at rates significantly lower than those of the local power company. This Federal-government-to-state-government interaction is expected to generate savings of approximately \$60 million over a four-year period.

Other Department efforts, while not expressly targeted as cost reduction/cost avoidance initiatives, have had favorable impacts on cost. These include: Environment, Safety and Health Work Smart Standards; streamlined reporting requirements; improved property inventory controls; and greater use of commercial procurement practices, i.e., elimination of the "Federal Norm" from management and operating contracts (Box II-1 describes this topic in more detail).

Box II-1

Elimination of The "Federal Norm"

Historically, DOE management and operating contractors performed in accordance with special and detailed regulatory direction known as the "Federal Norm." This direction required contractors purchasing systems to comply with the essential tenets, elements, and practices of the Federal procurement system used by the government to procure goods and services. The Federal norm concept, along with iterations of related reviews, audits, and protest decisions, produced increasingly Federal-like contractor procurement processes with practices that were often less efficient and cost-effective than their commercial counterparts.

Over the past two years, DOE has materially changed the policies and processes by which its management contractors conduct purchasing activities. Most significantly DOE eliminated the "Federal norm" in FY 1995 and replaced it with purchasing system objectives and standards common to both the commercial and public sectors.

A principal objective of this action was to guide the DOE contractor community from process-oriented business systems directed by burdensome regulations, to a system based on results-oriented independent contractor innovation. Information obtained from DOE, contractor chief executive officers, and laboratory directors indicates that eliminating the Federal norm has, even in the short term, yielded cost savings and cycle time reductions. For example:

- Westinghouse Hanford reported \$12 million in annual savings in the cost of purchasing operations;
- DOE Headquarters recorded savings of 12,000 person hours annually;
- Allied Signal (Kansas City Plant) reported a 97 percent reduction in process time; and
- Mason and Hanger (Pantex) reduced processing steps from 76 to 6.

Issues and Challenges

Establishing and Improving Baselines

While considerable progress has been made in the cost reduction area, several key weaknesses exist, including the need to establish comprehensive cost-reduction baselines. Currently, the Office of Environmental Management is conducting a major effort to improve site-wide baselines in conjunction with the *2006 Plan*.

Experience to date shows that DOE has had difficulty in establishing baselines integral to cost reduction efforts. DOE mission changes, such as from production to cleanup, require

continuing strategic planning and baseline development. Additionally, major changes in budgets and workload levels further complicate program baseline development and cost reduction efforts.

Developing Guidance and Standardization

While several cost reduction efforts discussed above were complex-wide, others were locally or programmatically generated. There has been no Department-wide standardization of definitions and approved methods of measurement. Cost saving terminology and categories have been established on a local or program-by-program basis. Important cost savings determinations such as the base year, inflation indices, time horizons, and reporting frequency have been made locally or programmatically. The result of non-standardization is that Department-wide cost-savings summaries often must be generated on an ad hoc basis and may not be routinely available for planning purposes. A related issue is the need for a common understanding of the difference between cost savings and cost avoidance.

Cost Reduction Issues at Nonprofit Organizations

Challenges also remain concerning the viability of the cost reduction program provision in contracts with nonprofit organizations. Experience to date shows that nonprofit contractors are principally motivated by opportunities to enhance their scientific programs. As a result, nonprofit contractors have made efforts to achieve cost avoidances since cost avoidances result in more funds being available for their scientific programs. Many of these efforts have centered on improving the effectiveness and efficiency of the support and operational functions of their laboratories. However, due to the potential for deobligation of funds from the contract, there appears to be little interest in formal cost reduction programs.

This is demonstrated by the Chicago Operations Office experience. The Chicago Operations Office, which manages several nonprofit contracts, uses a clause entitled, "Cost Avoidance and Reduction Programs" in its contracts. Under this clause, the contractor is encouraged to develop, prepare, and submit cost reduction proposals. If accepted by the contracting officer, the contractor may retain up to 50% of the net savings. The contractor's share is then invested in scientific research, development, and education, consistent with the research and development mission of the laboratory. For two of its facilities (Argonne National Laboratory and Fermi National Laboratory), Chicago has linked this clause to other benefits under the contract. Under the Fermi National Laboratory contract, the DOE share of savings (up to \$200,000) is used to supplement the Employee Recognition Fund. At Argonne National Laboratory, 40 percent of the DOE share of savings is used for the employee bonus pool. For a third facility (Brookhaven National Laboratory), there is no such linkage.

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The results of Chicago's various approaches are mixed at best. While Argonne National Laboratory has submitted some cost reduction proposals for consideration, neither Fermi National Laboratory nor Brookhaven National Laboratory have submitted proposals to date. This is very different from the experience with for profit contractors who have exhibited strong interest in cost reduction programs. It is clear that alternative approaches must be explored for the nonprofit contracts.

E. Diversity

Summary of Historical Practices

DOE and its predecessor agencies have historically supported the goals of equal employment opportunity for minorities, women, and persons with disabilities. In so doing, DOE developed policies, guidelines, practices and procedures to direct, implement, and manage its Equal Employment Opportunity and Affirmative Action Programs. Special programs conducted at various times of the year recognized the contributions of under-represented groups. To ensure contractor diversity received high priority throughout the reform process, the Department has directed its management and operating contractors to support these programs.

The Contract Reform Team report initially made 47 recommendations, but a 48th recommendation was added to ensure contractor diversity received high priority throughout the reform process. The Contract Reform Team's action item relating to diversity is shown in Table II-8.

Table II-8

Contract Reform Action Items Relating to Diversity

Objective of Action Item	Deliverable
Develop contract evaluation and selection criteria and related strategies that promote and facilitate economic diversity through the participation of small, small-disadvantaged, and women-owned business participation in DOE contracts.	Evaluation and selection strategies and criteria with guidelines for their use; identification of necessary training requirements and pilot applications.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

In response to the recommendation of the Contract Reform Team, DOE has emphasized diversity in contractor qualification and selection criteria in new ways. Prior to 1994, the principal method for addressing diversity was through the Small and Small Disadvantaged Business Subcontracting Plan. However, in response to the increased emphasis on diversity, solicitations and/or resulting contracts for several sites addressed diversity through additional mechanisms such as:

- Qualification criteria;
- Evaluation subcriteria;
- Consideration of diversity in key personnel;
- Past performance of small and small disadvantaged subcontracting;
- Inclusion of small and/or small disadvantaged businesses as a component of the offeror; and
- Evaluation of proposed diversity demographics.

Additionally, DOE has emphasized diversity through performance measures and incentives in contracts. For example, in the Lockheed Martin contract at Oak Ridge, performance in senior management diversity and subcontracting with small disadvantaged and women-owned businesses are tied to fee. At the Nevada Test Site, certain fees are tied to success in meeting DOE diversity goals. At the Thomas Jefferson National Accelerator Facility, DOE's evaluation of performance is complemented by a contractor self-assessment of efforts in several areas relating to diversity.

Diversity in Prime Contractor Employment

DOE's efforts to ensure diversity in prime contracting have been moderately successful despite steadily declining budgets and reduced employment. Due to declining budgets, DOE contractors have had limited opportunities to improve diversity through the use of new hires. The downsizing process has been managed so as to mitigate diversity issues. For example, Lockheed Martin has established a Reduction-in-Force Review Board to examine the basis for selecting individuals targeted for layoff. The Review Board monitors the specific impact on protected groups to ensure that they are not laid off disproportionately to their representation in the workforce. Table II-9 shows DOE contractors' overall improvements in diversity employment in the 1993-1996 period.

Diversity in Subcontracting

The Department also had moderate success in promoting economic diversity in the subcontracting practices of its major management contractors, but experienced a setback in FY 1996 performance relative to FY 1995 in this area. While the FY 1996 level represented improvements over a FY 1993 baseline, there were still substantial setbacks. Budget decreases have contributed to significant reductions in contract obligations and subcontract awards from prime contractors to subcontractors. For instance, the total prime contract obligations for FY 1993 decreased from \$17.98 billion to approximately \$15.72 billion in FY 1996 (a 12.4 percent reduction). Despite reductions in funding and subcontracting base, the Department's success in enhancing diversity has been largely due to its use of effective evaluation criteria, performance incentives, and make-or-buy plans. Tables II-10 and II-11 summarize progress in the subcontract arena.

Issues and Challenges

Addressing Diversity and Declining Budgets

As a result of likely further budget reductions, the Department will face continuing challenges in its efforts to improve diversity within the prime contractor and subcontracting workforce. In addition, a recent court decision (Adarand Constructors, Inc. vs. Peña 115 S.Ct.2097 (1995)) limits the extent to which Federal agencies can mandate the use of subcontracting to further diversity goals.

Table II-9

Total Contractor Workforce and Diversity Improvements between FY 1993 and FY 1996

		1993	1996
Total Contractor Employment		132619	100,801*
Diversity Representation Workforce	Total Minority Representation	16.7 %	17.5 %
	Minority Representation in Higher Positions**	9.13 %	10.14 %
	Women Representation	14.43 %	15.20 %
	African-American Representation	3.15 %	3.66 %
	Hispanic Representation	3.2 %	3.6 %
Total African-American		7.21 %	7.98 %
Total Hispanic		5.84 %	6.10 %

* Estimated; FY 1995 total was 110,801.

** Represents officers and managers, professionals, and technical workers.

Table II-10

Diversity With Respect to Overall Percent Total

Type	1993	1996
Small Business	18.55%	18.42 %
8(a) Program	1.56 %	2.26 %
Disadvantaged Business, non 8(a)	2.82 %	3.03 %
Women-owned Business	2.27 %	2.70 %

Notwithstanding these challenges, DOE is committed, consistent with Adarand, to promoting diversity through the use of performance incentives and mentor-protégé programs between large established business and minority enterprises.

The Department has been using buyouts and retirement incentive programs in the contractor workforce transition program to eliminate many senior contractor employee positions while still retaining minority and other younger employees to the extent feasible. DOE may not be as successful in using this mechanism in future contractor workforce downsizing efforts because there may be too few eligible employees to balance retaining protected groups. Notwithstanding increasing budget cuts and a diminishing subcontracting base, DOE anticipates taking advantage of existing opportunities to aggressively recruit qualified candidates and committing to diversity as a key organizational objective.

Table II-11

**Total Diversity Subcontract Dollars
Between FY 1993 and FY 1996**

Type	1993 (\$ millions)	1996 (\$ millions)
Small Business	3330	2890
8(a)	280	360
Disadvantaged Business non 8(a)	510	480
Women-owned Business	410	430

F. Worker, Public, and Environmental Protection

Summary of Historical Practices

Traditional DOE management and operating contracts did not provide well-defined criteria for environment, safety, and health (ES&H) performance and relieved contractors of most financial risk for poor performance. In some cases, contractors were actually rewarded with increased funds and fees to correct unresolved concerns. According to the General Accounting Office, these problems could be traced, in part, to a "flawed system of incentives that ...often rewarded contractors despite poor performance."

From an environment, safety, and health perspective, broad, nonspecific work statements did not encourage contractors to ensure that ES&H activities were adequately planned, funded, executed, or monitored. There was no mechanism to ensure that funds were spent on high priority concerns. Various DOE orders and directives were not uniformly applied.

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In addition, responsibility for environment, safety, and health performance at sites was either provided as a staff support function within an individual project, or was isolated as a central specialty function in a matrix organization. Often, safety was "added on" and apart from day-to-day work.

Furthermore, contract solicitations often did not contain explicit environment, safety and health-related criteria for the selection of contractors and the DOE environment, safety, and health organizations seldom influenced the contractor selection process. As a result, environment, safety, and health management was not always considered a contract performance requirement.

In 1994, the Contract Reform Team determined that environment, safety, and health considerations needed to play a more significant role in selecting contractors and developing, negotiating, and executing contracts. The Team also concluded that well-defined DOE performance expectations, substantive environment, safety, and health management systems (not just paper requirements), and contractor performance measures explicitly tied to contractor rewards and penalties were needed to leverage continuously improved performance. The Contract Reform Team's action item relating to worker, public, and environmental protection is shown in Table II-12.

Table II-12

Contract Reform Action Item Relating to Worker, Public, and Environmental Protection

Objective of Action Item	Deliverable
Develop incentives for environment, safety, and health risk-prevention programs.	Incentive mechanisms for environment, safety, and health risk-prevention programs.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

Improved Prime Contractor Environment, Safety, and Health Qualifications

A fundamental goal of the Contract Reform Initiative is to ensure that contractor organizations that manage and operate DOE sites and facilities achieve and maintain outstanding environment, safety, and health performance. Achieving this goal required new approaches to selecting and procuring contractor services. Promoting good environment, safety, and health performance required that, as part of contractor selection, DOE consider credentials as an eligibility requirement, establish discriminating criteria for use in contractor selection, and have the contractor establish commitments for future performance.

Since the Contract Reform Team report, environment, safety, and health selection criteria have been included in new DOE Requests for Proposals, and environment, safety, and health professionals have been active members of Source Evaluation Boards. As a result, contractors are now required to demonstrate successful, proven performance in this area and to document an approach to managing work that will ensure continuing performance. For example:

- Requests for Proposals for all major management contracts awarded since 1994 contained environment, safety, and health selection criteria or subcriteria (weighting varied);
- The DOE Office of Environment, Safety, and Health helped develop selection criteria for new contractor teams at Hanford, Nevada, and Savannah River; assisted in improving the environment, safety, and health content of scopes of work; and assisted the Source Evaluation Boards. The office also reviews all Requests for Proposals and new or renegotiated contracts for adequacy in this area;
- The Assistant Manager for Environment, Safety, and Health at both the Savannah River and Nevada Operations Offices chaired the Source Evaluation Boards for selecting management contractors for those sites; and
- Contract Reform implementation has led to the incorporation of substantially enhanced environment, safety, and health considerations into the scopes of work for the Savannah River, Nevada, and Hanford management contracts. With each new solicitation, DOE has continued to improve content based on lessons learned.

Improved Performance and Accountability

DOE has established a new environment, safety, and health performance accountability mechanism across the entire complex as part of contract reform. These efforts are also the cornerstone for implementing improved environment, safety, and health management systems

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and meeting a major DOE commitment to the Defense Nuclear Facilities Safety Board (DNFSB Recommendation 95-2).

Since 1994, 17 new or renegotiated contracts have incorporated new environment, safety, and health requirements aimed at ensuring that work is managed and conducted safely. The contract is now the primary vehicle for holding contractors accountable for environment, safety, and health performance.

Key features are:

- The contractor must submit documentation of its environment, safety, and health management system to DOE for review and approval, and the contractor is contractually bound to operate in the manner described;
- On an annual basis, DOE formally conveys environment, safety, and health performance expectations to its management contractors;
- Contractors are required to formally respond with documentation delineating work commitments to meet expectations, identify major risk vulnerabilities and the resources required to meet commitments, and manage risks consistent with budget targets and program objectives;
- Performance objectives and measures are established and agreed to by DOE and the contractor based on the commitments and major risks identified by both. Environment, safety, and health performance measures are directly tied to contractor rewards and penalties; and
- Prime contractors now have increased responsibility for the "flow-down" of environment, safety, and health requirements to subcontractors and for monitoring their performance. This is a particularly important aspect of accountability, since subcontractors often perform the most hazardous work at DOE sites.

All recent contracts deal specifically and in detail with safety improvement programs and compliance with environment, safety, and health regulations. Since March 31, 1995, DOE has invoked the use of environment, safety, and health performance measures, criteria, and corresponding incentive mechanisms to hold contractors accountable for performance.

Starting in 1995, DOE also has required all contractors to bear a greater share of the risk if they fail to meet environment, safety, and health expectations, and has placed greater reliance on financial incentives to promote accident prevention programs by contractors. To ensure effective implementation by all contractors, DOE incorporated into the fee clause of all new performance-based contracts the principle that a contractor's entire fee is at risk in the event of a fatality or serious injury, or illness caused by an accident. This clause underscores the

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increased importance that DOE places on accident prevention and the need to conduct work in ways that avoid loss of life or serious injury/illness to workers and the public.

Another example of innovative incentives put in place by DOE involves the new Hanford management and integration contract. This contract contains a fee-sharing arrangement to ensure successful environment, safety, and health performance by all subcontractors because successful performance is a pre-condition to obtaining the maximum fee for any contract activity.

In addition, a standard environment, safety, and health clause was included in the recently issued contract reform rulemaking. This clause institutionalizes the accountability mechanism outlined above and the requirement for integrated contractor environment, safety, and health management systems.

Improved Means for Determining Environment, Safety, and Health Requirements

All DOE site management contracts now include a new "Laws, Regulations, and DOE Directives" clause that standardizes the manner in which environment, safety, and health requirements are incorporated into contracts. Contractors must continue to comply with applicable Federal, state, and local laws and regulations (unless relief is granted by the appropriate regulatory agency or the Department).

Under this new clause, contractors are encouraged to tailor safety standards and requirements to the work and associated hazards at a given facility or site using DOE-approved processes. Tailoring processes may include approaches such as Work Smart Standards or the Standards and the Requirements Identification Document Process described in most contractors' safety management systems. Through this approach, DOE anticipates developing the optimum and appropriate set of safety standards for addressing environment, safety, and health at each one of its sites.

Other Results

The movement to performance-based contracts and to privatization/outsourcing has been accompanied by a substantial increase in attention to environment, safety, and health performance and accountability. DOE has made progress in explicitly including environment, safety, and health considerations into its budget planning and formulation process to ensure that these needs are identified and adequately addressed. The Contract Reform Initiative has been a motivating influence in extending environment, safety, and health management activities from the planning stage to work execution and performance consistent with contractual expectations. New contracts are intended to emphasize accident prevention and improved

worker and public protection programs, as opposed to after-the-fact punishment for noncompliance.

For example, since the publication of the Contract Reform Team Report, all management contracts have emphasized environment, safety, and health performance as a critical success factor, and each winning contractor has made commitments for improved performance. This has included reaching a DOE Voluntary Protection Program "STAR" status within the period of the contract, and other accomplishments. Participation by and recognition for contractors in this program fosters the same effective worker safety improvement and bench marking that the Occupational Safety and Health Administration has promoted in the private sector. Companies with similar programs have, on average, a 40 percent lower accident rate than nonparticipating companies.

Including environment, safety, and health considerations in the contractor selection process has created a partnership between the field and Headquarters organizations, as both parties attempt to establish and clarify expectations. The continued dialogue and alignment of environment, safety, and health into line business activities (i.e., holding line organizations accountable for performance) also has helped to raise awareness of its importance in getting the job done right and reducing costs and delays. The requirement for the management and integration contractor to have an environment, safety, and health management system has made it one of the prime contractor's most significant issues.

Issues and Challenges

Institutionalizing Prevention Strategies

The use of financial incentives and disincentives to improve environment, safety, and health performance is now widely accepted throughout the DOE complex. It appears, however, that experience in developing and applying them more effectively is still needed. DOE Headquarters and field personnel need to continue to work together and share lessons learned, particularly since some sites continue to use performance measures that are not tied closely enough to accident prevention or risk reduction.

In response to Defense Nuclear Facilities Safety Board Recommendation 95-2, DOE recently issued an implementation plan that provides an integrated safety management system beginning with pilot facilities, then extending to all DOE nuclear facilities. By implementing the plan, DOE anticipates significant improvements in the worker safety and accident prevention areas. While active DOE leadership has yielded contract provisions that encourage prevention strategies and programs, the Department recognizes that the application of these approaches in the field will only yield limited results without continued commitment to institutionalization of prevention strategies.

DOE also is supporting a number of important initiatives which could enhance its progress in meeting safety objectives established under contract reform. For example, the Office of Environmental Management Safety Policy recognized the need for holding line managers accountable for environment, safety, and health business planning and performance. Over time, this policy will be reflected in truly integrated safety management systems, in which the financial incentives are aligned with DOE's expectations for continually improving performance. However, the continuing reductions in Department funding combined with the difficulty of quantitatively measuring the results of accident prevention strategies, could adversely affect the level of effort DOE anticipates investing in this important area.

Devising Appropriate Contract Language and Incentives for Nonprofit Contractors

The Department has made progress on new, for-profit contracts in terms of selection criteria, incentives, and accountability. Applying performance-based incentives to nonprofit contractors, however, is not as straightforward because fee is not as readily available as an incentive mechanism. There is a need to pursue alternative incentive and accountability mechanisms for nonprofits. Since some of these contracts will be candidates for early regulation by external organizations such as the Occupational Safety and Health Administration, a focus on developing effective and appropriate transition mechanisms also will be important.

Interfacing the Management and Integration Contractor with Major Subcontractors

The move to performance-based contracts has resulted in some new prime and subcontractor teams at DOE sites. In its present form, the management and integration contractor concept envisions a beneficial outcome from obtaining "best in class" contractors to perform major functions at a DOE site. At the same time, the management and integration contractor and each major subcontractor bring with them a separate environment, safety, and health culture as well as methods for achieving performance. One issue of concern is the need for the management and integration contractors to improve their interface with subcontractors to ensure a seamless, coherent safety system with an understanding of respective roles and responsibilities. This seamless system is inherent in the "flow down" of ES&H requirements from prime to subcontractors envisioned in new prime contractor clauses. This is an area requiring significant attention.

Integrating Environment, Safety, and Health into Contractor Business Systems

Experience at DOE sites has demonstrated that a performance-based, business-like approach to environment, safety and health management can lead to improved performance even in an environment of reduced budgets. However, there can be a reluctance by DOE program organizations to fully appreciate that good environment, safety and health management is good

business. Situations may arise in the future where funding of environment, safety and health vulnerabilities are delayed to avoid a tradeoff with program funding. This is an area requiring significant DOE Headquarters attention to ensure that ES&H is not compromised during budget formulation and program implementation.

G. Financial Accountability

Contractor Financial Accountability

Summary of Historical Practices

Historically, the Department's policy was to reimburse management and operating contractors for virtually all costs incurred in performance of their contracts, including fines and penalties, third-party liability claims, and damage to government property. The only costs not paid by the Department were those resulting from willful misconduct or lack of good faith by the contractor's top level management, costs not found to be reasonable, and costs specified in the contract as unallowable.

The rationale for this approach, first articulated during the 1950s, was that the work was considered to be technically challenging, inherently dangerous, and so intimately a part of the government's national security mission that the Department should bear most of the risks associated with the work. In this regard, management and operating contractors were treated in many respects as extensions of the government, and because of this relationship, losses and liabilities were borne much as if the government itself had incurred them. Contractors had little incentive to emphasize risk management when they were indemnified and held harmless from virtually all risks.

The first significant attempt by DOE to reverse this practice and encourage contractors to manage risk more efficiently was made in January 1990 when the Department issued its Accountability Rule. This rule made profit-making management and operating contractors liable for certain costs, known as "avoidable costs," which resulted from negligence on the part of contractor or subcontractor employees (especially with regard to property management).

Under the Accountability Rule, the contracting officer had to make an affirmative determination as to whether certain costs could be considered avoidable before they could be disallowed. The Accountability Rule placed the burden of proof of cost allowability on the government, which had to assess a number of factors before making a determination of non-allowability. The administrative costs of investigating and assessing these factors frequently exceeded the

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amount of the costs in question. Furthermore, contractors were incurring additional costs by assisting the contracting officers with the investigation.

As part of its review of DOE's financial accountability systems, the Contract Reform Team found that the Accountability Rule contained a number of deficiencies that undercut its intended effectiveness. The Team concluded that the Accountability Rule had little measurable impact on contractor accountability and performance. The Contract Reform Team's action items relating to contractor financial accountability are shown in Table II -13.

Table II-13

**Contract Reform Action Items
Relating to Contractor Financial Accountability**

Objective of Action Item	Deliverable
Contractor Financial Accountability	
Revise the Department of Energy Acquisition Regulation provisions on fines and penalties, third-party liabilities, and related matters.	Notice of Rulemaking.
Develop/Implement a contractor indemnification scheme for response action contractors consistent with principles of section 119 of CERCLA.	Notice of Rulemaking (decision to address issue on case-by-case basis; thus no rulemaking).
Develop an explicit policy concerning the allow ability of defense costs in "whistle blower" cases.	Option paper on allowability of defense costs in "whistle blower" cases.
Litigation Management	
Issue uniform guidance on review and oversight of contractor litigation.	Guidelines on procedures for litigation management.
Institute training on litigation management techniques.	Identification of training programs and establishment of discussion format for Chief Counsel meetings.
Select one or two pilot cases for immediate implementation of cost-reduction techniques.	Report on pilot projects, including recommendations for cost reductions.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

As part of its efforts to address the Contract Reform Team's findings and recommendations, DOE initially developed "model" contract provisions which provided for greater financial accountability by DOE contractors. These provisions have been incorporated in virtually all major contracts awarded or renewed in the past three years. These provisions further provided the basis for provisions contained in a Notice of Proposed Rulemaking which was issued in the *Federal Register* on June 24, 1996. After receipt and consideration of comments, the Final Rulemaking was published in the *Federal Register* on June 27, 1997. This Final Rulemaking made the following changes from traditional DOE practices in the areas of fines, penalties, third-party liability, and property liability:

- Adopts Federal Acquisition Regulation standard for cost allowability and reasonableness (no presumption that an incurred cost is allowable; if DOE contracting officer identifies a concern or system review shows weakness, the contractor must demonstrate cost allowability);
- Eliminates the Accountability Rule;
- Makes fines and penalties unallowable unless in compliance with specific terms of contract or written instruction from contracting officer;
- Adds a new clause on preexisting conditions to recognize potential liabilities from activities before the contractor assumed site responsibility;
- Makes third-party liabilities allowable only if no willful misconduct or lack of good faith by contractor managerial personnel or failure to exercise prudent business judgment by the contractor's managerial personnel (a more stringent standard than the Federal Acquisition Regulation);
- Establishes environmentally-related third-party liabilities from performing "response action work" with the same standard as for other third-party liabilities;
- Makes litigation expenses, such as defending against personal injury lawsuits, allowable only if consistent with approved litigation management procedures and cost guidelines;
- Establishes a similar standard of liability for damage to or loss of government property as for third-party liabilities; contractor may be required to compensate the Government for loss, destruction, or damage to government property;
- Shifts responsibility to the contractor to substantiate costs when the contracting officer challenges an incurred cost. Represents shift from existing policy, which placed burden substantially on Government; and
- Reduces Government costs associated with fines, penalties, third-party liability, and property liability.

Litigation Management

Summary of Historical Practices

By 1994, DOE was spending over \$30 million annually to pay the fees of outside counsel retained by its contractors. Three sites alone--Albuquerque, Oak Ridge, and Richland--each reported contractor outside counsel expenditures in excess of \$7 million for FY 1992. These fees were incurred largely in defense of actions brought by third parties, most often "toxic tort" class action suits filed against contractors managing DOE sites. There was no guidance on practices and procedures to be used by DOE's field counsel in connection with ongoing litigation. As a result, the chief counsels in the field offices developed their own operating practices, which differed from office to office. These methods were not sufficient to control litigation expenses.

Implementation

Since 1994, the Office of General Counsel has worked aggressively to address the Contract Reform Team's findings and recommendations. In March 1994, the office issued litigation management procedures to DOE field counsel. Thereafter, the office published in the *Federal Register* (August 31, 1994) cost guidelines to set out the scope of reasonable costs for class-action and non-class-action cases. These efforts were followed by the Office's litigation management manual in July 1996. The manual compiled and distributed cost policies (to DOE and contractor counsel) and provided uniform guidance on managing litigation, legal bill review checklists, and related source material.

The Office of General Counsel also addressed the need for training in litigation management techniques. For example, in March 1995, 22 DOE field office counsel involved in litigation management met to discuss DOE guidance on cost management techniques. Budget constraints have curtailed needed training, but Headquarters regularly notifies field offices of legal education seminars on litigation management so field counsel can track innovative ways to control litigation costs. In February 1996, Headquarters issued to the field a "lessons learned" memorandum that discussed common problems encountered in the first year of the litigation management initiative, solutions to those problems, and next steps for application to the site level.

Further, the Office of General Counsel explored litigation cost reduction techniques in a pilot case. The defense of the *In re Hanford* toxic tort class action suit, which involved 12 law firms defending six contractors, was consolidated so that only two firms defend all the contractors. This consolidation reduced annual litigation costs by more than 60 percent, from a high of \$11 million in FY 1992 to \$4.1 million in FY 1995. Similarly, the consolidation of the *Cook v. Rockwell* toxic tort class action at the Rocky Flats Environmental Technology Site was

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completed during the final months of FY 1996; as a result, litigation costs that have averaged \$3.7 million annually have been reduced.

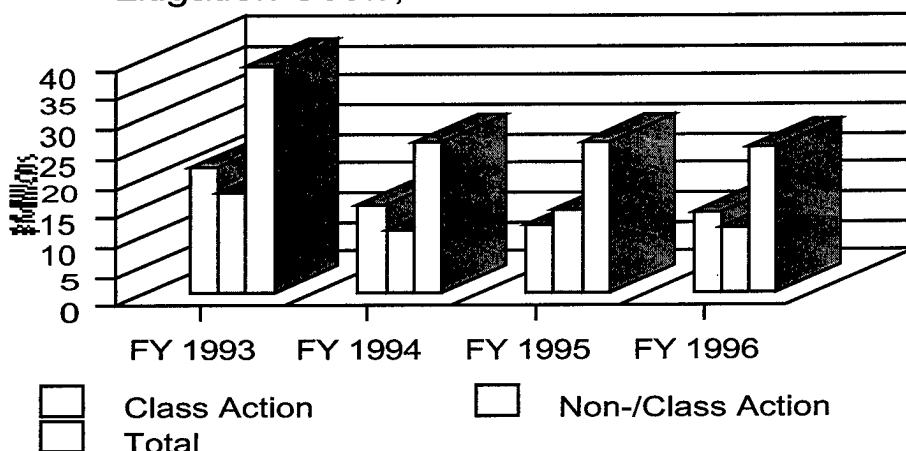
Cost reductions also are expected with regard to the class action filed in January 1997 involving the Paducah Gaseous Diffusion Plant (*Smith v. Union Carbide Corporation*) since the three named contractors have agreed to a consolidated defense. One lead and one local law firm will represent all three contractors from the outset. Finally, other contractors/sites such as the University of Chicago/Argonne National Laboratory and Lockheed Martin/Sandia National Laboratory have reduced litigation costs through combinations of the following:

- Compliance with the Office of General Counsel's guidance on litigation management;
- Processing more cases in-house;
- Settling cases, where advisable, prior to lawsuits;
- Competing the procurement of outside counsel;
- Surveying the market for prevailing rates for specific technical and legal requirements for cases; and
- Using more firm-fixed-price arrangements (where appropriate).

The Office of General Counsel has conducted annual audits at nine major field sites. These audits have shown where litigation cost guidance has been effective and where improvement is needed. In addition, a computerized cost-tracking system has been developed that allows DOE field sites to input cost data that both Headquarters and field programs use to track ongoing litigation costs.² DOE uses the cost-tracking system to compile quarterly cost reports that show contract litigating expenditures according to site and case. Analysis of litigation costs shows that the Department has achieved a 36 percent decrease in total litigation costs from 1993 through 1996 (Figure II-1).

²Field sites are required to input all approved litigation costs each quarter of the fiscal year.

Figure II-1--Department of Energy
Litigation Costs, FY 1993 - FY 1996



The number and complexity of lawsuits filed and Court-imposed requirements affect the costs of litigation. Thus, while consistent and effective application of litigation management guidance can minimize unnecessary activity and charges, it cannot ensure continuously decreasing costs.

Although not directly related to contractor litigation management activities arising out of the Contract Reform Team report, the Department also has created the Office of Dispute Resolution to promote alternative dispute resolution methodologies (i.e., mediation, arbitration, and partnering) in contractual and labor disputes. Alternative methodologies usually stress the use of informal procedures to resolve differences and lower both direct (attorney fees) and indirect costs (cost and time for management personnel to support the litigation process). The Office of Dispute Resolution has trained over 500 supervisors, managers, team leaders, and contracts personnel.

Issues and Challenges

Addressing Results of Contractor Financial Accountability

The short-term consequence of promoting greater contractor accountability has been a general increase in fees to cover the perceived additional risk. Several nonprofit contractors who manage and operate DOE laboratories have received fees where none were received before. Additionally, many nonprofits are reluctant to risk their own assets (due to unwillingness to place endowments at risk) in return for fees that may be insufficient to provide coverage against potential liabilities.

The longer-term effect is uncertain for both profit and nonprofit contractors. Clearly, if the new policy is responsible for a reduction in fines and penalties, third-party claims, or damage to or loss of government property, then the policy has major benefits. However, to date there is insufficient experience to assess the overall impact of the new policy. Moreover, there is a need to closely monitor this effort to ensure that the relation between increased fees, improved performance, and dollars saved is advantageous to the government.

Preventing Litigation

In general, most DOE programs recognize the need to adopt approaches for reducing costs of ongoing lawsuits. The self-assessment data show, however, that insufficient effort goes into processes to prevent future litigation, such as reviewing existing cases for lessons learned. Other opportunities for realizing additional cost savings include:

- Coordinating budgetary issues between DOE and other defendants more effectively; and
- Assigning a single DOE element, (e.g., the DOE element with cognizance over the primary defendant) to manage the litigation case.

H. Improved Financial Management

Financial Management Systems

Summary of Historical Practices

The Department inherited from its predecessor agencies a financial management process in which the Chief Financial Officer developed and maintained an integrated system of budgeting, accounting, and program cost reporting. With respect to financial information of management and operating contractors, DOE treated contractors as subsidiaries, consolidating and reporting contractors' financial information. The Contract Reform Team determined that DOE's information systems did not provide all the kinds of data needed to manage contractors and programs effectively. The financial information-gathering and reporting systems used by the Chief Financial Officer were principally designed to report financial conditions, not to evaluate program performance. Notwithstanding the extensive financial data collected, little could be used by senior managers to evaluate where costs could be reduced and whether the programs were cost-effective. The Contract Reform Team's action items relating to improved financial management are shown in Table II-14.

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Table II-14

**Contract Reform Action Items Relating to
Improved Financial Management**

Objective of Action Item	Deliverable
Financial Management Systems	
Improve DOE's financial management information system.	Develop plan for revised financial information systems. Original end product modified by Executive Committee.
Ensure that the Office of Inspector General's audit goals place high priority on reviews and evaluations of contractors' financial management systems.	Revised audit plans that reflect the new priorities of the Department.
Train DOE managers to use integrated financial and managerial reporting systems effectively.	Training program and implementation plan.
Payment Issues	
Explore the use of alternatives to the voucher accounting for net expenditures accrued.	Report and recommendations on alternatives.
Evaluate increasing departmental capability for review and audit of contracts and contractors.	Report on evaluation and recommendations for alternatives.
Provide the Defense Contract Audit Agency with the funding needed to eliminate audit backlog.	Report on costs and benefits of obtaining additional resources and recommendations on alternatives.
Reexamine the need for advanced funding through special bank accounts.	Report recommending improvements and/or changes and alternatives.
Cost Control	
Manage contractors maintenance costs more effectively.	System to track maintenance costs.
Develop a department-wide policy on pension fund management and oversight.	Policy for managing and overseeing pension funds.
Develop departmental policy on claims adjustment and evaluation of contractor risk management.	Policy for insurance risk management.
Implement improved overtime policy.	Policy on use of contractor overtime.
Conduct two reviews of uncosted balances each year.	Report on uncosted balances twice a year.

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

To address the Action Item relating to improvements in DOE's financial management information system, DOE chartered a Financial Information Team, which prepared the report entitled, "Financial Management Excellence...A Better Way to Manage" in May 1995. The report recommended that to significantly improve financial management systems, the Department should:

- Strengthen its planning, budgeting, and execution processes;
- Efficiently capture and report cost information needed to compare and analyze its activities and functions to support decision making;
- Improve management of its resources and enhance program effectiveness with an expanded performance management structure;
- Improve decision making by developing a Management Information System;
- Improve availability, accuracy, and integrity of management information while reducing costs by electronically integrating business management systems; and
- Replace its accounting system with state-of-the-art software that will seamlessly integrate with other Department management systems.

The report led to development of requirements for financial systems which could be employed to standardize the Department's financial management systems and significantly reduce costs.

The Department was successful in securing funding to begin the process of procuring a financial management information system, including implementation of an Executive Information System (EIS), in fiscal year 1998 and has initiated efforts to replace the Department's Financial Information System (FIS). It is anticipated that the EIS will provide more timely budget, cost, and performance management information to managers and improve the ability to prepare consolidated and timely management reports.

In addition, the Department has made progress in other areas of financial management that do not require significant capital expenditures. A major initiative has been to establish the Financial Management Systems Improvement Council (FMSIC), which is comprised of members from the contractor community, field offices, and the Office of the CFO. The fundamental intent of FMSIC is to improve contractor financial management systems and processes and to increase efficiency and effectiveness through:

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- The sharing of successful approaches (best business practices) and benchmarking among contractors;
- The development of business requirements and common technology for financial management systems; and
- The identification of systems which lend themselves to common processes in pursuit of standardization.

Working with the Headquarters Office of CFO and program offices, FMSIC helped to develop a DOE Functional Cost Reporting System. Other FMSIC accomplishments include initiating and completing a Department-wide benchmarking initiative for CFO functions to identify best-in-class performance and best practices.

Other financial management improvement initiatives that are currently being pursued throughout the Department include:

- Extensive redesign of the financial management system at the Sandia National Laboratory to simplify processes and align them with commercial business practices. This effort affects virtually all components of financial management and is expected to provide better control of financial transactions through increased line management accountability, benchmarking, and visibility at the corporate policy level;
- Implementation of an integrated business system approach used by a number of Fortune 500 companies by the contractors at the Savannah River and Oak Ridge sites. This approach is expected to increase visibility into financial operations and to provide on-line access to financial data; and
- DOE's initiation of three financial management training courses. These courses are: Budgeting and Accounting for DOE Program/Project Managers, Indirect Costs for Program/ Project Managers, and DOE Life-Cycle Asset Management in a Performance-Based Contracting Environment.

The new financial control/reporting systems being developed and implemented by the DOE contractors are expected to facilitate new contract reform practices, such as multiple fee arrangements and performance measures.

Advance Funding/Special Bank Accounts

Summary of Historical Practices

Traditionally, DOE provided advance funding by letters of credit through a special bank account to management and operating contractors. The letter of credit method of payment allows the contractor's financial institution to draw down funds to cover contractor payments

as they clear the special bank account for payment. During FY 1993, DOE spent nearly \$16 billion as advance payments under letter-of-credit arrangements. Because of this mechanisms, contractors did not have to finance the cost of operation, and DOE did not have to compensate the contractor for financing costs through higher fees. Monthly voucher payment processing was generally not required.

However, a significant disadvantage of this advance funding mechanisms was that DOE, to a large extent, depended on the contractor to identify and remove unallowable costs from its accounts. And to the extent that costs were disputed, DOE's ability to withhold funds or to recoup funds was limited. As a result, the Contract Reform Team recommended that DOE conduct a cost-benefit analysis of the use of advance funding to determine whether the practice was conducive to sound financial management or whether it should be eliminated.

Implementation

In response to this recommendation, the DOE Chief Financial Officer assessed the feasibility of totally eliminating the special bank account advance funding mechanism (payments cleared financing arrangement) for major contractors and instituting a voucher system. In a report of October 1994, the Chief Financial Officer found that the voucher system was significantly more costly than the advance funding mechanism because of higher processing costs and the working-capital costs contractors would recover through higher fees.

With regard to the central issue of the ability of the DOE to identify, withhold and/or recoup unallowable costs, the Chief Financial Officer concluded that the voucher system does not provide any inherent advantages over advance funding. To facilitate disallowance and recoupment of unallowable costs, the report recommended, among other things, that the contracting officer make direct fee payments (rather than having the fee withdrawn by the contractor from funds advanced) or that the contract require the Contracting Officer's advance written approval before the withdrawal of any funds for fee payment by the contractor. Furthermore, the report recommended that the contracting officer should have the ability to offset against any fee payments amounts owed to the Government by the contractor, including any amounts owed for disallowed costs under the contract.

The new contract for the Savannah River Site, which retains advance funding, contains a clause that allows DOE to deduct from fee payments any amount owed to the government, "including any amounts owed for disallowed costs under this contract." The Waste Isolation Pilot Plant contract utilizes a special bank account/payments cleared financing arrangement, but only allows fee to be withdrawn after written approval of the Contracting Officer. DOE expects these approaches to permit the continuation of the less costly and more efficient advance funding mechanism while providing an adequate level of protection to the government.

Prior to the issuance of the Chief Financial Officer's report, the Department released a solicitation for a new management and integration contract for the Rocky Flats Environmental Technology Site. The final contract eliminated the advance funding mechanism and applied a voucher system approach. Rocky Flats reports that eliminating the advance funding through a special bank account resulted in the addition of a \$2.7 million base fee in the contractor's best and final offer for the first year of the contract in large part to cover the contractor's cost of using its own funds. This base fee has since ranged from \$2.7 million to \$3.6 million. Administrative costs associated with the vouchering process were much higher than the traditional letter of credit/payments cleared method. However, it was believed that the voucher approach would result in significant cost savings through improved oversight of contractor cost submissions.

Under the Rocky Flats contract, the Contracting Officers are responsible for certifying to the finance office the reasonableness of the payment voucher. The Contracting Officers in turn rely on their Contracting Officers Representatives (CORs) to provide them assurance as to the level of performance and reasonableness of costs incurred. The DOE technical and contracting staffs were inexperienced in reviewing vouchers and in the necessary certification to the finance office to support the payment process. Since initiating the voucher system, the DOE Rocky Flats staff has been exploring options to streamline the process. They also have been obtaining expert advice from the DOD on cost validation. Nevertheless, the Rocky Flats staff believes that the long run benefits of the voucher system will outweigh the disadvantages for their site, and the DOE office is committed to assuring effective implementation.

In the Project Hanford Management Contract (PHMC), the Richland Operations Office implemented a creative approach which sought to reduce fee payments while strengthening mechanisms to remove unallowable costs. Based on responses to the Request for Proposals for the contract, the Department determined that the letter-of-credit method offered annual net cost savings of \$10.1 to \$15.3 million, and the contract selects this financing approach.

However, the Richland Operations Office has supplemented the letter-of-credit approach with auditing and monthly invoicing mechanisms to strengthen its ability to identify and remove unallowable costs. The monthly invoice consists of the following three items: (1) a summary hard copy invoice showing the monthly incurred costs and cumulative costs to date; (2) an electronic file containing costs for the month by Budget and Reporting numbers, Activity Data Sheets, project and sub-project, and the detailed data for the cost amount submitted on the hard copy invoice; and (3) a report that reconciles letter of credit drawdowns for the month with incurred costs for the month. The review of PHMC costs is primarily the responsibility of the Defense Contract Audit Agency (DCAA) and the appointed 34 RL Contracting Officer Representatives (COR).

DCAA is assisting the Richland Operations Office in the approval and monitoring of the PHMC's accounting system to assure compliance with Cost Accounting Standards, Federal Acquisition Regulation Cost Principles and Generally Accepted Accounting Principles. DCAA will perform annual reviews to determine if: (1) direct and indirect costs are appropriately identified, accumulated, and reported; (2) unallowable costs are appropriately identified, and segregated, and are not billed to the site; (3) the timekeeping and labor distribution systems are adequate; and (4) the estimating system is adequate to generate sound project baselines.

The Contracting Officer Representatives have authority, responsibility, and accountability for their projects. The electronic invoice file is sorted by project and is accessible to all CORs. Each COR analyzes the monthly costs incurred and determine whether the PHMC is "on schedule", the work is "within scope" and costs are "reasonable." If the COR identifies problems with the project costs, the Contracting Officer is to be notified.

If any unallowable or unallocable costs are identified by either DCAA or the CORs, the Contracting Officer directs the contractor to offset these costs against the fee payment due the contractor. All fee payments must be approved in advance by the Contracting Officer. In the event unallowable costs exceed base fee, the prime contractor is required to reimburse the government via certified check.

Followup of the alternative approaches implemented by the Department to respond to the problems identified by the Contract Reform Team will be essential to assure that the pros and cons of these approaches are carefully reviewed and that DOE refines its practices to maximize cost-effectiveness.

Cost Control

Summary of Historical Practices

In addition to examining and improving its cost reimbursement policies, DOE has also examined some specific categories of costs and cost control.

Uncosted balances: The Department had \$10.8 billion in uncosted balances at the end of FY 1993. Uncosted balances represent funds which have been obligated by the Department, but for which actual costs have not yet been incurred. There was a need to determine whether and to what extent any uncosted balances should be reprogrammed or identified for use in off-setting future budget requirements.

Overtime: Using overtime to get a job done can often be a prudent and cost-effective course of action when compared to hiring new permanent workers. However, the use of overtime can

be abused. In FY 1992, 9 percent of the contractor workforce earned greater than 40 percent of its earnings from overtime compensation. In FY 1993, that figure dropped to 7 percent. However, the Contract Reform Team felt that further reductions could be obtained through improved work definition and better management of personnel.

Pensions and risk management: Reviews by the General Accounting Office, the DOE Inspector General, and other organizations indicated that DOE management of pension assets and liabilities totaling more than \$20 billion dollars was inadequate. Furthermore, DOE had not issued any formal guidelines in administering and funding pension plans by its contractor employees since 1982. It was recognized that a policy was needed which would require DOE approval for plan changes which increased or decreased DOE contributions to contractor pension plans.

The Contract Reform Team recommended that the Department develop a policy for managing contractor pension benefit costs. Subjects such as pension fund obligations, funding, benefit levels, employee transfers, and incumbent employees rights needed to be addressed. The Team also recommended developing a policy for insurance management covering issues such as risk management and definition of coverage requirements under general liability.

Implementation

Uncosted Balances: Over the past several years, the Department has made significant progress in reducing the level of uncosted balances. Currently, the Department's total uncosted balances are the lowest they have been in over 15 years. Total Department-wide balances were reduced from approximately \$10.8 billion in FY 1993 to \$6.6 billion in FY 1996. The largest reductions were \$1.1 billion and \$2.3 billion in fiscal years 1995 and 1996, respectively.

Beginning in FY 1996, the Department changed its methodology for analyzing uncosted balances. Recognizing that there was a legitimate rationale for the retention of some level of uncosted balances, DOE established dollar level thresholds which specify levels of uncosted balances that are consistent with sound financial management for specific types of financial/contractual arrangements. This allows the Department to evaluate its overall performance based on the variance between the calculated thresholds and actual balances.

Overtime Costs: As a result of efforts to better manage overtime, overtime for management contractors has declined from 4.7 percent of the base payroll in FY 1993 to 3.95 percent in 1995. In addition, the Department developed an improved overtime policy, which was published as part of its final contract reform rulemaking. Under this policy, individual contractor overtime practices exceeding specified criteria would trigger a requirement for the

contractor to develop an overtime control plan, with the contractor establishing specific controls for the use and evaluation of overtime.

Pensions and Risk Management: On September 30, 1996, the Department issued DOE Order 350.1, "Contractor Human Resources Management Programs," which includes policies for both pensions and risk management. This Order provides, among other things, limitations on annual DOE reimbursements of pension contributions and a framework through which DOE contractors can develop a cost-effective program for handling liability matters.

Issues and Challenges

Developing Financial Management Systems

The Department's financial management systems still lack the ability to provide management and support staff with easy and timely access to all the key financial information needed to support day-to-day decision making. Currently, managers and support staff must obtain data from multiple systems and then collate the data before they can analyze the operations they oversee. Additionally, the Government Performance and Results Act of 1993 requires Federal agencies to more effectively plan, budget, execute, evaluate and account for federal programs. The Department is pursuing several initiatives to address these shortcomings/requirements, including the following:

- Development of an Executive Information System to provide useful summarized financial and business information to corporate executives and senior managers. This system will both support the decision making process and achieve the goals put forward by the GRPA;
- Development of the Financial Data Warehouse--a single source of detailed Departmental financial information that can be easily accessed at a user's desktop; and
- Development, acquisition and implementation of a contemporary comprehensive Financial Management Information System to replace the Departmental Primary Accounting System. This system will better focus on Departmental business processes and financial information requirements.

Finally, although the need for a consistent report on functional support costs has been addressed by the new Functional Support Cost Reporting System, this system still needs to be evaluated for expansion to the entire Department. Evaluations will continue at least through December of FY 1998, with decisions on the future of the system made after that time.

Financial management improvements will require a significant investment of time and money. Therefore, a sustained leadership commitment is necessary to ensure that sufficient resources are provided in a time of tight budgetary resources.

Reviewing Contractor Overtime Requirements

Since FY 1993, contractor overtime has declined as a result of focused management attention. However, based on the self-assessment responses, there is a continuing need to evaluate current levels of overtime use to ensure that they are appropriate for efficient operations, and yet not so high as to promote abuses. Such evaluation can be performed by Department review of the contractor's overtime control plan (submission of which is a requirement under the new policy), particularly the contractor's evaluation of alternatives to overtime and cost-effectiveness of the contractor's proposed plan.

Pensions and Risk Management

The new DOE Order 350.1 transfers significant authority to field offices. However, in carrying out their responsibilities, field offices need new sets of skills and knowledge in both the pension and risk management areas. Training must be provided to facilitate good DOE administration and decision-making.

I. Greater Use of Federal Acquisition Regulation Contract Terms and Cost Principles

Summary of Historical Practices

Management and operating contracts traditionally contained a set of terms, conditions, and cost principles that were drawn from the Department of Energy Acquisition Regulation (DEAR). Use of this Department-specific regulation rather than the government-wide Federal Acquisition Regulation (FAR) was justified by the special nature of the Department's activities. However with mission changes following the end of the Cold War, increasing questions were raised about DOE's continued use of these special regulations with respect to cost-reimbursement policies. Accordingly, the Contract Reform Team recommended that the Department increase its use of FAR contract clauses and its use of FAR cost principles, particularly in such areas as cost allowability and reasonableness of costs. The Contract Reform Team's action items relating to greater use of Federal Acquisition Regulation contract terms and cost principles are shown in Table II-15.

Table II-15

**Contract Reform Action Items Relating to Greater Use of
Federal Acquisition Regulations' Contract Terms and Cost Principles**

Objective of Action Item	Deliverable
Apply comparable reimbursement rules to nonprofit contractors.	Notice of rulemaking.
Develop guidance on determining the "reasonableness" of contractor costs.	Guidelines on "reasonableness."

Source: U.S. Department of Energy, Making Contracting Work Better and Cost Less, Report of the Contract Reform Team, February 1994.

Implementation

Since 1994, there has been an increased use of FAR-based contract terms throughout the DOE complex. The Rocky Flats, Hanford, and Fernald contracts evidence these changes. These sites have undergone significant mission changes, and the Department believes the new terms and conditions are more appropriate for the work that is now being done.

In addition, the Department has had an ongoing effort to assess the overall need for DEAR policies and procedures in light of the Department's mission changes. One result of this effort is the contract reform Rule issued in June 1997 which addresses a number of cost-reimbursement policies and makes greater use of FAR standards. For example, DOE has adopted the burden-of-proof standard of cost allowability under the FAR. Under that standard, no presumption of reasonableness is attached to the incurrence of costs by a contractor. If an initial review of the facts results in a challenge of a specific cost by the Contracting Officer, the burden of proof is on the contractor to establish that such cost is reasonable. This policy is expected to improve the government's ability to challenge unallowable costs by placing greater responsibility for justifying and documenting costs on the contractor. A number of contracts (Argonne National Laboratory and Fermi National Acceleration Laboratory, for example) already have incorporated this approach.

Although the benefits of increased use of FAR contract terms and cost principles are difficult to quantify in these early stages of contract reform, DOE and contractor officials believe that:

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- Competition is facilitated because firms that are relatively unfamiliar with DOE are more comfortable with the FAR terms and cost principles in use throughout the government;
- Because FAR terms and cost principles are used throughout the government, their use by DOE adds a significant measure of uniformity and consistency to contracting; and
- Contractor protests, disputes, and claims may be reduced due to the long history of interpretations and adjudications of the FAR terms and cost principles by courts and boards.

At the same time, it is clear that there will be continued need for the DEAR to cover special needs of the M&O contracting environment and any unique statutory and regulatory issues. Not all sites have undergone the major mission changes that characterize sites such as Rocky Flats and Hanford. The FAR, in fact, recognizes this need. The FAR states in Part 1.301(a)(1) that, "an agency head may issue or authorize the issuance of agency acquisition regulations that implement and supplement the FAR and incorporate, together with the FAR, agency policies and procedures, contract clauses, solicitation provisions, and forms that govern the contracting process or otherwise control the relationship between the agency...and contractors or prospective contractors." The FAR specifically anticipates the need for supplementary regulations for M&O contracts in FAR Part 17.602(a) by stating that, "Heads of agencies...may determine in writing to authorize contracting officers to enter into or renew any management and operating contract in accordance with the agency's statutory authority, or the Competition in Contracting Act of 1984, and the agency regulations governing such contracts" (emphasis added).

SECTION III

RECOMMENDATIONS

While contract reform activities are pervasive in the Department and, as noted above, major accomplishments have been achieved, the self-assessment has also identified numerous challenges and issues. Addressing these challenges will require a commitment to continuous improvement and a commitment to changing the Department's process-oriented culture to a culture that is focused on results. Based upon information derived from the self-assessment, the following actions need to be taken:

1. Strengthen the Department's policy, planning, and guidance relating to contract reform by, for example:
 - Completing development of a Department-wide fee and incentive policy and rulemaking;
 - Providing additional guidance on the development and administration of performance measures and incentives; and
 - Ensuring that a clear linkage exists between strategic planning and acquisition planning at the Departmental.
2. Develop on-going programs of systematic analysis for key areas of contract reform. Areas that are candidates for analysis include: implementation of performance-based incentives; effectiveness of fixed-price contracting mechanisms; implementation of teaming arrangements and privatization approaches; alternative competition procedures for nonprofit contracts; results of new regulations governing contractor accountability; and processes such as performance data collection, problem identification, and corrective action recommendations.
3. Continue efforts to realign management and financial systems with the needs of contract reform by, for example:
 - Completing the development and implementation of new financial information systems to provide timely cost and performance information to managers; and
 - Developing improved systems for identification, collection, and reporting of costs. This includes completing implementation of a Department-wide functional support cost reporting system. The system will assist the Department in improving efforts in performance measurement, incentive development, baselining, benchmarking, overtime control, litigation cost control, and support cost control.

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4. Address for human resource needs by, for example:
- Performing a skills assessment of current employees to determine training and hiring requirements in such key contracting areas as contractor selection, contract negotiation, administration of performance-based management contracts, and administration of fixed-price contracts; and
 - Establishing a Headquarters/Field cadre of experts (e.g. procurement, legal, technical, ES&H) to assist and advise sites and offices in solicitations, negotiations, and administration of performance-based management contracts.

APPENDIX A

Actions Recommended by the Contract Reform Team

(*Note: Appendices are not included in PDF version.)

APPENDIX B

March 15, 1994
Memorandum Establishing
the Executive Committee for
Contract Reform

(*Note: Appendices are not included in PDF version.)

APPENDIX C

July 5, 1994 Decision Memorandum

(*Note: Appendices are not included in PDF version.)

APPENDIX D

Final Rule on Competition

(*Note: Appendices are not included in PDF version.)

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